

THE GENERAL ELECTRIC CO., LTD.

Known throughout the World as the



G.E.C.



Manufacturers and Suppliers of Everything Electrical.

WORKS:

ENGINEERING WORKS	Witton, BIRMINGHAM.	INSTRUMENT WORKS	Silk Street Salford.
CARBON WORKS	Witton, BIRMINGHAM.	OSRAM-G.E.C. LAMP WORKS	Brook Green, Hammersmith, LONDON.
LAMP BLACK WORKS	Witton, BIRMINGHAM.	ACCESSORIES WORKS	Union Works, WEMBLEY, LONDON.
BATTERY WORKS	Witton, BIRMINGHAM.	GLASS WORKS	LEMINGTON-ON-TYNE and WEMBLEY.
STEEL CONDUIT WORKS	Witton, BIRMINGHAM.	METER WORKS	BIRMINGHAM.
"MAGNET" FAN WORKS	Witton, BIRMINGHAM.	STEAM-TURBINE WORKS	ERITH.
SWITCHGEAR WORKS	Witton, BIRMINGHAM.	CONVEYING AND MINING	ERITH.
MOULDED INSULATION WORKS	Witton, BIRMINGHAM.	PLANT WORKS	ERITH.
TELEPHONE WORKS	STOKE, near Coventry.	CABLE WORKS	SOUTHAMPTON.
WIRELESS APPARATUS WORKS	STOKE, near Coventry.	HEATING AND COOKING	Magnet Works, Landor Street, APPARATUS WORKS) BIRMINGHAM.

RESEARCH LABORATORIES WEMBLEY, Middlesex.

HOME BRANCHES:

	Address,	Telephone No.	Telegrams,
ABERDEEN	Magnet House, 30 Adelphi	Central 2770/1	"Electricity."
BELFAST	Magnet House, Queen Street	7321/2/3	"Electricity."
BIRMINGHAM	Magnet House, Moor Street	Central 7944/51 (8 lines)	"Electricity."
BLACKPOOL	Magnet House, 24 Birley Street	1809	"Magnet."
BRISTOL	Magnet House, 81 Victoria Street	4482/3...	"Electricity."
CARDIFF	Magnet House, Castle Arcade & Womanby Street	2620	"Electricity."
CORK	Magnet House, 78 Grand Parade	823	"Relay."
DUBLIN	Magnet House, Trinity Street	2477/8/9	"Electricity."
DUNDEE	26/30 North Lindsay Street	2168/9 (2 lines)	"Electricity."
EDINBURGH	Magnet House, 100 Hanover Street	23241/2/3	"Electricity."
GLASGOW	Magnet House, 71 Waterloo Street	Central 0250	"Electricity."
HULL	Magnet House, 28 Charlotte Street	Central 2821/2	"Electricity."
IPSWICH	Westgate Chambers, 40b Westgate Street	3771 (2 lines)... 20671 (3 lines)	"Electricity." "Induction."
LEEDS	Magnet House, Wellington Street	Central 58778	"Electricity."
LUCESTER	Magnet House, 3 Campbell Street	Royal 5380 (6 lines)	"Electricity."
LIVERPOOL	Magnet House, Church Alley	Central 7460	"Electricity."
MANCHESTER	Magnet House, Victoria Bridge	3621/2	"Electricity."
MIDDLESBROUGH	Magnet House, 52/58 Corporation Road	5275/6/7/8	"Electricity."
NEWCASTLE-ON-TYNE	Magnet House, Gallowgate	43547/8	"Switch."
NOTTINGHAM	Magnet House, 4 Chapel Bar	2268/9...	"Electricity."
PLYMOUTH	Magnet House, 175 Union Street	25101/2/3	"Electricity."
SHEFFIELD	Magnet House, Fitzalan Square	5631/2/3	"Magnet."
SOUTHAMPTON	Magnet House, 149 High Street	Central 5049	"Electricity."
SWANSEA	Magnet House, 44 Wind Street	Central 5049	"Electricity."

OVERSEAS BRANCHES:

AUSTRALIA:

BRITISH GENERAL ELECTRIC CO. LTD.,
Magnet House, 104 to 114 Clarence Street, SYDNEY (N.S.W.).
Magnet House, 590 Bourke Street West, MELBOURNE (Victoria).
Magnet House, 21 Pulteney Street, ADELAIDE (S. Australia).
370 to 372 Murray Street, PERTH, (Western Australia).
Corner of Scott and Bolton Streets, NEWCASTLE (N.S.W.),
with agencies in BRISBANE (Queensland), HOBART (Tasmania),
and in the Fiji, Navigation, and Friendly Islands.

NEW ZEALAND :

BRITISH GENERAL ELECTRIC CO. LTD.
31-37 Taranaki Street, WELLINGTON.
Hannaford Building (P.O. Box No. 70), CHRISTCHURCH.
Brunswick Buildings High Street (P.O. Box No. 1794) AUCKLAND.

SOUTH AFRICA :

THE BRITISH GENERAL ELECTRIC CO. LTD.,
Corner of Loveday and Anderson Streets (P.O. Box No. 2406),
JOHANNESBURG.
Corner of Lower Berg and Riebeck Streets (P.O. Box 1327), CAPETOWN.
20 Queen Street (P.O. Box No. 42) PORT ELIZABETH.
Magnet House 56 Field Street, DURBAN,
with agencies in SALISBURY and BULAWAYO (Rhodesia), and
EAST LONDON (Cape Province).

AGENCIES IN ALL OTHER PRINCIPAL TOWNS THROUGHOUT THE WORLD.

Head Office : Magnet House, Kingsway, London, W.C.2.

Telephone: Temple Bar 8000 (70 lines). Telegrams: "Electricity, Westcent, London." Cablegrams: "Polyphase, London."

G.E.C.

IRONCLAD SWITCHGEAR



THE GENERAL ELECTRIC CO., LTD.

TERMS OF BUSINESS & CONDITIONS OF SALE.

1.—HOW TO ORDER.

WHEN ORDERING :—

- (a) Quote Section Letter and Catalogue No.—If special quotation has been submitted, give quotation reference also.
- (b) State whether order to be sent in one consignment only, or whether immediate delivery is to be made of what is in stock.
- (c) If it is not imperative that the exact articles specified be sent, add the words "or similar."

TELEPHONE ORDERS :—

The telephone number of the G.E.C. Head Office, Magnet House, Kingsway, is Temple Bar 8000 (70 lines). That of each of the Company's branches will be found on page 4 of the cover of the principal G.E.C. Catalogue Sections. The Company is prepared to execute orders from its customers received by telephone, but in the interests of customers themselves, all such orders should be confirmed in writing. All Orders confirming Verbal Orders should be plainly marked "Confirmation."

CORRESPONDENCE :—

Owing to the variety of the goods handled by the Company, letters and telegrams dealing with orders should specify :

- (a) Order number and date.
- (b) The nature of the goods, or the section of the catalogue concerned.

2.—A WARNING.

Instances have occurred where Shippers, Merchants, Contractors, and others receiving indents, specifications, and orders for goods described merely by reference to letters and numbers contained in the Company's Catalogues, have quoted for or supplied the goods of other manufacturers under the said letters and numbers. The Directors of the Company have been advised that such action is a fraud upon the Company's rights, and have been successful in obtaining an injunction and damages in proceedings taken in the Chancery Division of the High Court of Justice. The injunction restrained (inter alia) the use or employment in connection with electrical goods not manufactured or supplied by the Plaintiffs, of letters or figures having reference to the Plaintiffs' Catalogue, so as to induce the belief that such goods are manufactured or supplied by the Plaintiffs.

While inviting all persons engaged in the electrical trade to make frequent reference to the Company's Catalogue as a standard work on electrical materials and goods, the Directors feel bound to issue this warning against an improper use of the Catalogue.

3.—GENERAL CONDITIONS OF SALE.

The Company will use its best endeavours to execute Orders to time, but under no circumstances will be responsible for late delivery.

The Catalogue prices are those ruling on date of issue and are subject to alteration without notice.

The Company reserve the right to cancel any uncompleted Order or suspend delivery in the event of any of the buyers' engagements not being duly met, or if they have reason to believe that such engagements may not be met.

RETURNS :—

Goods cannot be taken back later than 10 days from date of Invoice.

Returned goods will not be accepted unless accompanied or preceded by an Advice Note.

Advice Note must state reason for the return of goods, the date, reference letter and number of the Invoice on which the goods were charged.

The acceptance of returned goods does not necessarily entitle to credit for same. Credit can only be given when the claim has been examined and found correct.

Goods should not be returned in cases consigned as "empty," since, if so consigned, they are very liable to get lost in transit, or overlooked, in which case the Company will not hold themselves responsible, and no credit can be given.

BREAKAGE, DAMAGE, AND PILFERAGE :—

Except in special cases the Company do not hold themselves responsible for any loss or damage in transit.

Goods should be examined immediately on delivery, and in case of breakage, damage, or pilferage, the Consignee should notify the Carriers immediately, and lodge a claim within three days of delivery, keeping the broken or damaged articles for examination.

In the case of non-delivery claim must be lodged with the Carriers within fourteen days of despatch.

ALLEGED SHORTAGE :—

Claims for alleged shortage can only be entertained if received within three days of receipt of goods and if accompanied by fullest possible particulars of case, number, condition, etc.

CONSEQUENTIAL DAMAGE :—

Whilst every care is taken to ensure correct execution of orders, and whilst any faulty goods are of course replaced, the Company will not entertain claims for consequential damage, loss of time sustained, cost of repairs executed without previous consent.

SUBSTITUTION OF IMPROVED DESIGNS :—

The Company will supply that pattern which experience has shown to be the best, instead of invariably sending exactly the one that may be ordered.

DIMENSIONS AND DRAWINGS :—

Although all dimensions and drawings appearing in the Company's Catalogue have been compiled with every possible care, no guarantee is given that same will not be departed from or varied without notice.

HOME ORDERS.

TERMS OF PAYMENT :—

Ledger Accounts will be opened upon satisfactory references being furnished.

Accounts are payable monthly, subject to a Cash Discount of 2½ per cent. if paid during the month following delivery, unless otherwise agreed (except Electrical Plant—P Section of the Company's Catalogue—which is strictly Nett).

No Cash Discount will be allowed off Overdue Accounts or Accounts under £1.

Cheques, Postal and Money Orders to be made payable to THE GENERAL ELECTRIC COMPANY, LIMITED, and crossed as follows :—

"MIDLAND BANK LIMITED."

DELIVERY :—

Goods are delivered free within our Van Delivery areas. Outside these areas orders of the value of £10 and upwards will be sent carriage free within the usual delivery areas of the Railway Companies in Great Britain.

(NOTE.—Our extensive van deliveries cover a radius of approximately 12 miles from the G.P.O., London, and in the case of most of our Provincial Branches, approximately 6 miles from their local G.P.O.)

CASES :—

All cases and packing material are charged at cost price, full value being allowed if returned in good condition and carriage paid within one month, and duly advised; only two-thirds value will be allowed on machinery cases.

EXPORT ORDERS.

TERMS OF PAYMENT :—

Unless otherwise arranged, customers are requested to provide for payment through a London Bank against Bill of Lading.

Payment for orders received from Export Houses in Great Britain will be 2½ per cent. Cash within seven days or Nett monthly account (except Electrical Plant—P Section and Oram Lamps OS Section of the Company's Catalogue—which are strictly Nett).

DELIVERY :—

Free Warehouse or Works. ELECTRICAL PLANT free on rails Birmingham. Extra charge for delivery f.o.b. case and packing.

THESE TERMS ARE SUBJECT TO MODIFICATION BY SPECIAL CONDITIONS RELATING
TO DIFFERENT DEPARTMENTS, DETAILS OF WHICH WILL BE SENT ON REQUEST.



REGD. TRADE MARK

G.E.C.

X & Y

Section

2nd EDITION

September, 1929.

IRONCLAD SWITCHGEAR

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The prices in this List apply only in Great Britain, Northern Ireland, and Irish Free State, and are subject to the Company's standard Conditions of Sale, as given on page 2 of cover.

THE GENERAL ELECTRIC CO., LTD.

Head Office: MAGNET HOUSE, KINGSWAY, LONDON, W.C.2.

Telephone: Temple Bar 8000 (70 lines). Telegrams: "Electricity, Westcent, London."

Cablegrams: "Polyphase, London,"

Works:—WITTON, BIRMINGHAM, MANCHESTER, COVENTRY, SOUTHAMPTON, ERITH,

WEMBLEY, LONDON, Etc.

BRANCHES THROUGHOUT UNITED KINGDOM, AND IN ALL PRINCIPAL MARKETS OF THE WORLD.

(X 3990).



GENERAL VIEW OF G.E.C. SWITCHGEAR WORKS, WITTON.

IRONCLAD SWITCHGEAR.

INTRODUCTION.

The extensive application of electricity to house service and industrial purposes during recent years has completely revolutionised the design and construction of low and medium tension ironclad switchgear.

It is now generally recognised that reliable and properly designed switches and cut-outs are essential adjuncts of house service and industrial equipment, as they have to control and protect not only the consumer's installation but also the cables and apparatus of the supply undertaking.

The ironclad material illustrated and described in this catalogue is designed and manufactured by The General Electric Co., Ltd., at its Switchgear Works, Witton, Birmingham.

This works is one of the largest in the world entirely devoted to the manufacture of switch and control gear ; it is laid out on thoroughly scientific lines, and is equipped with the most modern machine tool equipment necessary for high class work.

The G.E.C. has many years of experience in the manufacture and installation of low, medium and high tension switchgear, and has achieved a world-wide reputation for excellence in design and construction of such apparatus.

Every part of G.E.C. switchgear is liberally rated, both mechanically and electrically ; the design embodies the latest requirements for efficient and reliable service in power and lighting schemes and fully complies with B.O.T. and Home Office Regulations.

G.E.C. ironclad material comprises a complete range of totally enclosed switch and fuse gear, distribution boards, etc., which have been designed specially for house service installations, mills, factories, shipyards, workshops, etc., and service in exposed positions.

Special attention has been given to the development of totally enclosed flame-proof switchgear for Colliery and Mining Work, which complies with Home Office Mining Regulations in every respect.

The utmost care is taken in every detail in the design and manufacture of all types of industrial switchgear, to render it capable of satisfactory operation under the most arduous service conditions.

G.E.C. switchgear can, therefore, be relied upon as the best obtainable, and the services of experts are always at the disposal of customers for advice on any problems connected with the installation of switch and control gear.

"D.B." SWITCHES AND SWITCHES WITH FUSES.

QUICK-MAKE AND QUICK-BREAK.

SPECIFICATION.

Case. Fine grained cast-iron. Switches with fuses are silicate lined, are dust and weather-proof, and are fitted with detachable end plates. Switches without fuses can be rendered weather-proof by inserting a gasket in groove in lid.

Action. Positive quick-make and quick-break. There are two breaks on each pole and the action is synchronous. The non-corrosive actuating springs are in tension only during operating.

Interlock. The cover of the cast-iron case is interlocked with the switch, so that normally the case cannot be opened with the switch closed or the switch closed with the case open. By loosening the detachable handle of the switch, or switch with fuses, a competent and authorised person is enabled to operate the switch when the case is open and examine its working. (B.S. Spec. No. 124-1923, clause 42).

Barriers. The switch contacts are deeply shrouded by porcelain with the exception of the 100 amp. switches with fuses which are shrouded by fireproof insulating shields.

Switch Blades and Contacts. The blades of hard drawn H.C. copper are firmly secured to a square section steel coupling bar insulated the full length by Bakelite. The fixed contacts are mounted on porcelain with the exception of the 100 amp. switches with fuses which are mounted on insulated steel supports.

Fuses. Home Office shielded type. The carriers are fitted with self-aligning solid brass block contacts, which engage with hard drawn H.C. copper spring jaws deeply recessed in the base and fitted with phosphor bronze reinforcement in the 100 amp. size. The fuse wires are enclosed in asbestos tubes supported in the body of the carriers.

Terminals. Of the clamp type, being brass blocks with two cheese-headed screws in each in the 60 amp. size. The 100 amp. size is fitted with sweating sockets.

Cable Insets. The 100 amp. switches and 60 amp. and 100 amp. switches with fuses are supplied either with detachable plates undrilled or tapped one hole top and bottom $1\frac{1}{2}$ in. E.T. and 2in. E.T. respectively. The cases of the 60 amp. switches only are tapped $1\frac{1}{2}$ in. E.T.

Home Office Regulations. "D.B." switches and switches with fuses comply in every respect with Home Office Factory Regulations.

Switchboards. "D.B." Switchgear combined with various attachments and accessories can be made to form complete ironclad unit switchboards.

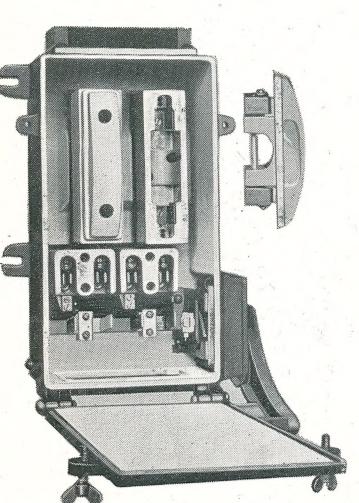
Neutral Connectors. Triple pole switches with fuses can be supplied with an additional connection for the neutral in the same case for three-phase four-wire circuits.

"D.B." SWITCHES AND SWITCHES WITH FUSES.

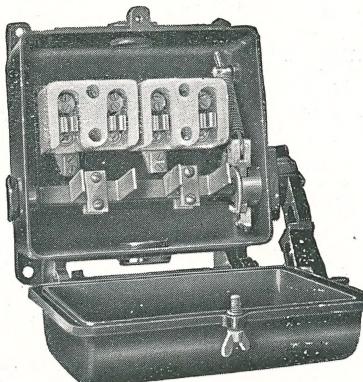
QUICK-MAKE AND QUICK-BREAK.

FOR CIRCUITS UP TO 600 VOLTS.

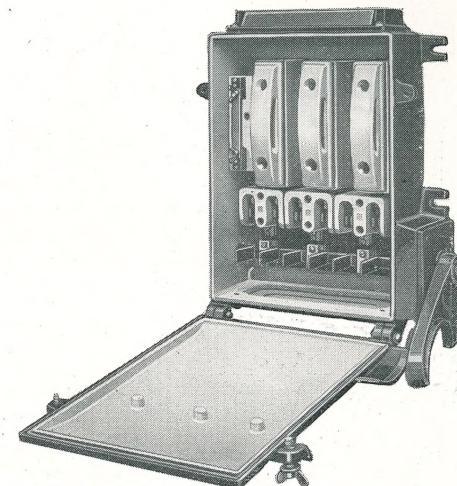
HAVING LARGE CAPACITY FUSES FOR HEAVY DUTY SERVICES.



X 4414



X 4404



X 4434 L

SWITCH ONLY.						
Double Pole.					Triple Pole.	
Capacity. Amps.	Volts.	Catalogue Number.	Approximate Weight.	Price, each.	Catalogue Number.	Approximate Weight.
60	600	X 4404	lbs. $13\frac{1}{2}$	kilos. 6.12	£ s. d. 1 2 0	X 4424
150	250	X 4405	57 $\frac{1}{2}$	26.0	3 11 3	X 4425
100	600				76	34.47
SWITCH WITH FUSES.						
100	250	X 4414	38	17.23	3 7 3	X 4434
60	600				48	21.77
150	250	X 4415	80	36.28	6 8 0	X 4435
100	600				100	45.3
TRIPLE POLE SWITCH WITH FUSES AND NEUTRAL CONNECTOR.						
		Capacity. Amps.	Volts.	Catalogue Number.	Approximate Weight.	Price, each.
		60	600	X 4434 L	lbs. 48	kilos. 21.77
		100	600	X 4435 L	100	45.3
					£ s. d.	4 16 0
					£ s. d.	9 17 0

For dimension drawings, see pages 34 and 35.

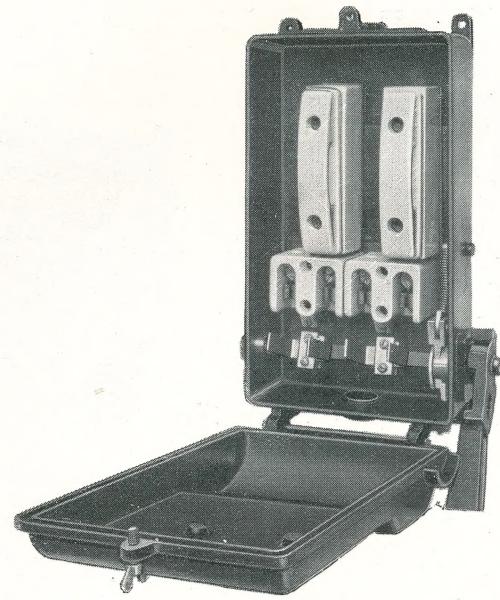
For attachments and accessories, see pages 21-24.

G.E.C.

"D.B. MAJOR"
SWITCH WITH FUSES.
QUICK-MAKE AND QUICK-BREAK.
FOR CIRCUITS UP TO 500 VOLTS.



X 4432 L



X 4412

- Case.** Cast-iron with external fixing lugs; can be rendered weather-proof by inserting gasket in groove provided in lid.
Action. The operating handle is detachable which reduces packing space for export.
Switch Blades and Contacts. Switch blades are of hard drawn H.C. copper firmly secured to a square section steel coupling bar, insulated the full length by Bakelite. Fixed contacts of hard drawn H.C. copper, the terminals having each two cheese-headed clamping screws.
Fuses. The fuse units are those used in Y 2142 single pole form (see page 28). The carriers are fitted with self-aligning solid brass blocks, the base contacts are hard drawn H.C. copper with brass terminal blocks each with two cheese-headed clamping screws. The fuse wires are enclosed in asbestos tubes.
Home Office Regulations. The "D.B. Major" switch with fuses complies in every respect with Home Office Factory Regulations.
Cable Inlets. The case is drilled and tapped one hole top and bottom, 1½in. E.T. and fitted with screwed insulating bushes.

DOUBLE POLE.

Capacity Amps.	Catalogue No.	Approx. Overall Dimensions.			Approx. Weight.		Price, each.
		Height.	Width.	Depth.	lbs.	kilos.	
50	X 4412	ins. 15	ins. 9	ins. 5	22½	10.2	£ 1 11 9

TRIPLE POLE.

50	X 4432	16½	12	7½	33	15	2 8 0
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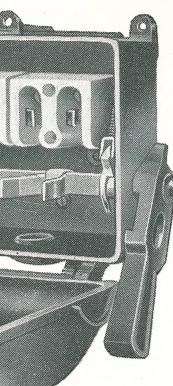
TRIPLE POLE WITH NEUTRAL CONNECTOR.

50	X 4432 L	16½	12	7½	34½	17.25	2 11 6
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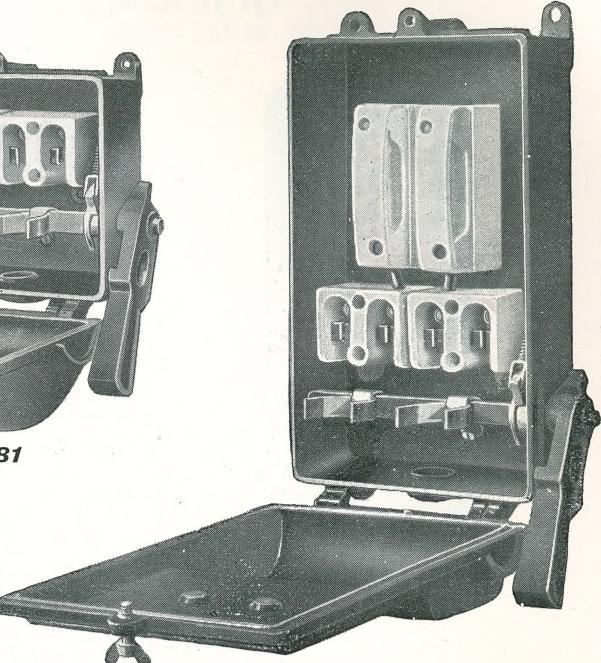
For dimension drawings, see page 35.
For Switches only, see page 5.

G.E.C.

"D.B. SENIOR"
SWITCHES AND SWITCHES WITH FUSES.
QUICK-MAKE AND QUICK-BREAK.
FOR CIRCUITS UP TO 500 VOLTS.



X 6081



X 6085

X 6087L

Case. Cast-iron with external fixing lugs; can be rendered weather-proof by inserting gasket in groove provided in lid.
Action. The operating handle is detachable which reduces packing space for export.

Switch Blades and Contacts. Switch blades are of hard drawn H.C. copper firmly secured to a square section steel coupling bar, insulated the full length by Bakelite. Fixed contacts of hard drawn H.C. copper, the terminals having cheese-headed clamping screws.

Fuses. The fuse units are those used in Y 2054 single pole form (see page 28). The base contacts are substantial brass blocks with headed clamping screws. Fuse holder contacts are of hard drawn H.C. copper. The fuse wires are enclosed in asbestos tubes.

Home Office Regulations. "D.B. Senior" switchgear complies in every respect with Home Office Factory Regulations.
Cable Inlets. The cases are drilled and tapped one hole top and bottom 1½in. E.T. and fitted with screwed insulating bushes.

SWITCH ONLY.									
DOUBLE POLE.				TRIPLE POLE.					
Capacity Amps.	Catalogue No.	Approx. Weight.		Price, each.	Catalogue Number.	Approx. Weight.		Price, each.	
		lbs.	kilos.			lbs.	kilos.		
50	250	X 6081	8½	3.85	£ 13 0	X 6083	12½	5.77	£ 19 3
30	500								

SWITCH WITH FUSES.

30	500	X 6085	15½	7.2	17 9	X 6087	23	10.43	1 5 9
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TRIPLE POLE SWITCH WITH FUSES AND NEUTRAL CONNECTOR.

	Capacity Amps.	Catalogue No.	Approx. Weight.		Price, each.	
			lbs.	kilos.		
	30	500	X 6087 L	23	10.43	£ 1 13 9

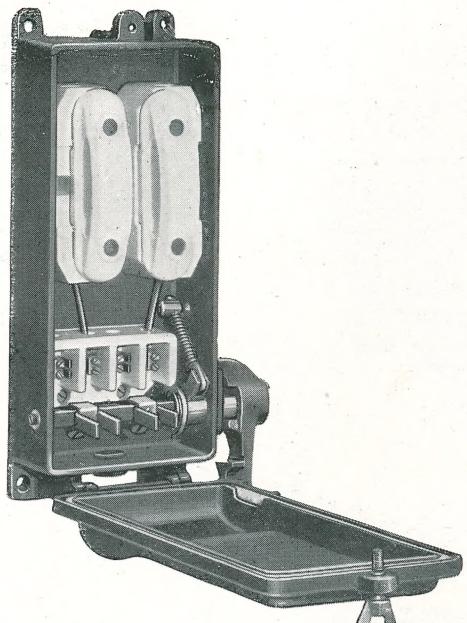
For dimension drawings, see page 35.

G.E.C.

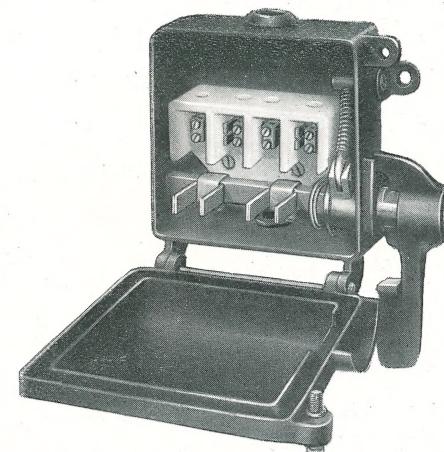
"D.B. JUNIOR"

SWITCHES AND SWITCHES WITH FUSES.

QUICK-MAKE AND QUICK-BREAK.



X 3010



X 6491

Case. Cast-iron, with external fixing lugs; can be rendered weatherproof by inserting gasket in groove provided in lid.
Action. Positive quick-make and quick-break. The strong non-corrosive actuating spring is in compression only during operating.

Switch Blades and Contacts. Switch blades of hard drawn H.C. copper, firmly secured to a square section steel coupling bar insulated the full length by Bakelite. Fixed contacts of brass with two clamping screws and phosphor bronze side pressure wings.

Fuses. The fuse units are those used in Y 2053 single pole cut-outs (see page 28). The base contacts are substantial brass blocks with headed clamping screws. Fuse holder contacts of hard drawn H.C. copper. The fuse wires are enclosed in asbestos tubes.

Home Office Regulations. "D.B. Junior" switchgear complies in every respect with Home Office Factory Regulations.

Cable Inlets. The cases are drilled and tapped one hole top and bottom $\frac{3}{4}$ in. E.T., and fitted with screwed insulating bushes.

SWITCH ONLY.

DOUBLE POLE.

TRIPLE POLE.

Capacity. Amps. Volts.	Cat. No.	Approx. Overall Dimensions.			Approx. Weight.			Price each. s. d.	Cat. No.	Approx. Overall Dimensions.			Approx. Weight.			Price each. s. d.	
		Height	Width	Depth.	lbs.	kilos.	Height			ins.	ins.	ins.	lbs.	kilos.	Height		
		ins.	ins.	ins.	3	1.35	ins.			4 $\frac{1}{4}$	6 $\frac{1}{2}$	3	4 $\frac{1}{4}$	1.92	ins.		
20 | 250 } X 6491		4 $\frac{3}{4}$	5 $\frac{1}{2}$	3	3	1.35	5 0	X 6493		4 $\frac{3}{4}$	6 $\frac{1}{2}$	3	4 $\frac{1}{4}$	1.92	7 3		
10 | 500 }																	

SWITCH WITH FUSES.

20 250 }	X 3010	10 $\frac{3}{4}$	5 $\frac{1}{2}$	3	7	3.18	9 6	X 3012	11 $\frac{1}{4}$	7 $\frac{3}{4}$	3	9 $\frac{1}{2}$	4.31	14 3
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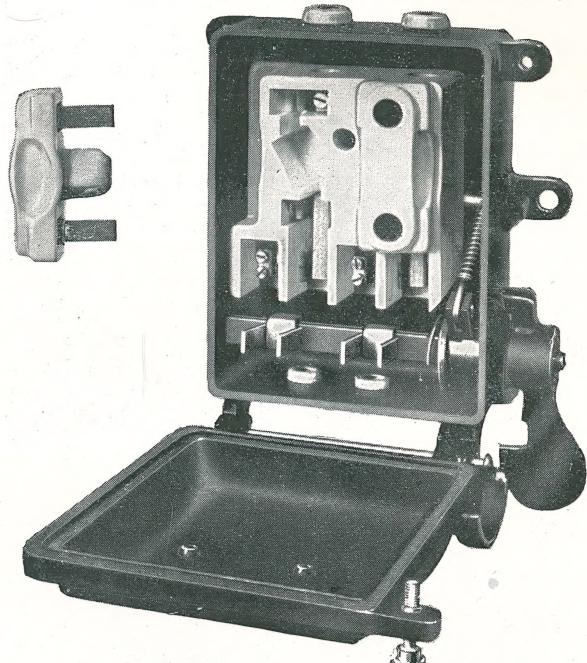
Clamps for Single Wire Armoured Cable, for use with above, 4/9 per pair.

G.E.C.

"D. B. MINOR"

SWITCHES WITH FUSES.

QUICK-MAKE AND QUICK-BREAK.



Y 3020

Case. Cast-iron, with external fixing lugs; can be rendered weather-proof by inserting gasket in groove provided in lid.
Action. Positive quick-make and quick-break. The strong non-corrosive actuating spring is in compression only during operating.

Switch Blades and Contacts. Switch blades are of hard drawn H.C. copper firmly secured to a square section steel coupling bar insulated the full length by Bakelite. Fixed contact blocks of brass with two clamping screws and phosphor bronze side pressure wings. All parts of ample current density.

Fuses. The carriers are fitted with heavy section brass blades, which engage with substantial brass contact blocks provided with phosphor bronze side pressure wings.

The fuse wire passes through an asbestos tube fixed in the body of the holder, and when in position is situated low down in the deep arcing chamber in the base.

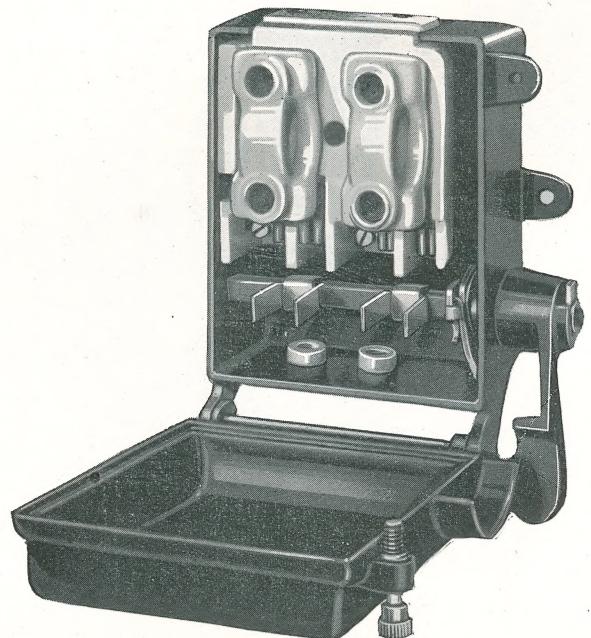
Home Office Regulations. "D.B. Minor" Switchgear complies in every respect with Home Office Regulations.

Cable Inlets. There are two entries at bottom of case and two at top in the double pole, and three in the triple pole—all wood bushed. The double-pole form can also be supplied with one hole top and bottom, tapped $\frac{3}{4}$ in. E.T.

Capacity. Amps. Volts.	Catalogue Number.	Type.	Approx. Overall Dimensions.			Approx. Weight.		Price, each. s. d.
			Height. ins.	Width. ins.	Depth. ins.	lbs.	kilos.	
15 | 250 }	Y 3020	Double Pole	6 $\frac{3}{4}$	5 $\frac{1}{2}$	3	4 $\frac{1}{2}$	2.04	6 9
10 | 500 }	Y 3022	Triple Pole	6 $\frac{3}{4}$	7 $\frac{1}{4}$	3	5 $\frac{3}{4}$	2.56	11 3

"DEE BEE"

**15 AMP. SWITCH WITH FUSES.
QUICK-MAKE AND QUICK-BREAK.
DOUBLE POLE.**



X 3021

This Switch with Fuses has been specially produced to provide a small but thoroughly efficient unit for the control of House Services at a low cost.

Case. Cast Iron with external fixing lugs.

Action. Positive quick-make and quick-break. The strong non-corrosive actuating spring is in compression only during operating.

Switch Blades and Contacts. Are all of hard drawn H.C. copper, the blades are firmly secured to a square section steel coupling bar insulated the full length by Bakelite.

Fuses. Both fuse holder and base contacts are of hard drawn H.C. copper. The fuse wire passes through an asbestos tube fixed in the body of the holder, and when in position is situated low down in the deep arcing chamber in the base.

Terminals. All terminals are brass blocks with cheese-headed clamping screws.

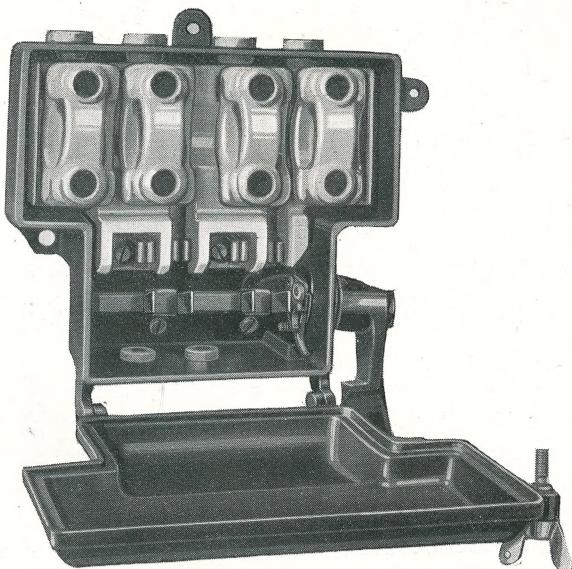
Home Office Regulations. The "Dee Bee" switch fuse complies in every respect with Home Office Regulations.

Cable Inlets. There are two wood-bushed entries at the bottom of the case. The outgoing cables are lead straight into the terminals in the base which protrudes through the top of the case.

Capacity.		Catalogue Number.	Approximate Overall Dimensions.			Approx. Weight.		Price each.
Amps.	Volts.		Height.	Width.	Depth.	lbs.	kilos.	
15	250	X 3021	ins. 5 $\frac{1}{4}$	ins. 5 $\frac{1}{4}$	ins. 2 $\frac{7}{8}$	3 $\frac{3}{4}$	1.52	s. d. 5 6

"DEE BEE" SPLITTER.

**15 AMP. DOUBLE POLE SWITCH WITH TWO WAY
DOUBLE POLE FUSES.
QUICK-MAKE AND QUICK-BREAK.**



X 3024

Specially suitable for small house wiring installations and Housing Schemes ; combines the functions of a double-pole main switch and two-way double-pole fuse board.

Case. Cast-iron with three external fixing lugs.

Action. Positive quick-make and quick-break. The strong non-corrosive actuating spring is in compression only during operating.

Switch Blades and Contacts. Are all of hard drawn H.C. copper, the blades are firmly secured to a square section steel coupling bar insulated the full length by Bakelite.

Fuses. Both fuse-holder and base contacts are of hard drawn H.C. copper as are also the connecting strips between fuses. The fuse wire passes through an asbestos tube fixed in the body of the holder, and when in position is situated low down in the deep arcing chamber in the base.

Terminals. All terminals are brass blocks with cheese-headed clamping screws.

Home Office Regulations. The "Dee Bee" Splitter switch fuse complies fully with Home Office Regulations.

Cable Inlets. There are two entries at the bottom of the case, and four at the top, all wood bushed and situated opposite the terminals.

Capacity.		Catalogue Number.	Approx. Overall Dimensions.			Approx. Weight.		Price, each.
Amps.	Volts.		Height.	Width.	Depth.	lbs.	kilos.	
15	250	X 3024	ins. 7	ins. 6 $\frac{1}{4}$	ins. 3 $\frac{3}{8}$	5 $\frac{1}{2}$	2.48	s. d. 9 6

S.E.C.

"SALFORD"

SWITCHES AND SWITCHES WITH FUSES.

REGISTERED NO. 572152.

Cases.

The cases are of fine grained cast-iron, and are dust and damp-proof.

Break.

The break is long and rapid. The force necessary to operate the blade is transmitted by means of malleable iron castings or steel stampings, which prevent any chance of straining the springs. The springs quicken the break only after the blade has left the jaws.

Current Density. The current carrying parts are rated at 1,000 amperes per square inch, for hard drawn H.C. copper, and the surface contact at 90 amperes per square inch.

Interlock. The cover of the cast-iron case is interlocked with the switch so that it is impossible to open the case when the switch is closed, or to close the switch when the case is open. Any danger of withdrawing the fuses when the circuit is alive is thereby precluded.

Insulating Barriers. The poles of the switch are separated from each other by means of substantial fire-proof insulating barriers, preventing arcing from one pole to the other.

Switches of 75 amperes capacity and upwards are provided in addition with arcing shields and barriers, preventing any arc from reaching the case. All switches with fuses are similarly protected, and each fuse is in a separate compartment of insulating material.

Fuses. Home Office shielded type, with self aligning solid brass block fuse holder contacts and hard drawn H.C. copper spring jaws in the base. Up to and including 100 amperes, they are of the totally enclosed china unit type, and in the larger sizes the Handguard type.

Terminals. In sizes up to 200 amperes, all terminals are arranged to clamp the cables without the use of cable sockets, no soldering being necessary. The 300 and 400 ampere sizes are fitted with standard sweating sockets. Front connection terminals only are supplied.

Home Office Regulations. "Salford" switches and switches with fuses comply with Home Office Regulations for the use of electricity in factories, the inlet cables being connected to the top contacts of the switch and the outlet cables connected to the bottom. Thus the switch blades and fuses are dead when the switch is open. All cases are provided with an earthing terminal.

Cable Insets. Double pole switches have two holes and triple pole switches three holes top and bottom all fitted with hardwood bushes, which can be drilled to suit the cables used.

50 ampere switches are plain drilled 1 $\frac{1}{8}$ in. diameter.

75	"	"	"	"	1 $\frac{1}{8}$ in.	"
100	"	"	"	"	1 $\frac{1}{8}$ in.	"
150	"	"	"	"	1 $\frac{1}{8}$ in.	"
200	"	"	"	"	1 $\frac{1}{8}$ in.	"
300	"	"	"	"	1 $\frac{1}{8}$ in.	"
400	"	"	"	"	2 $\frac{3}{16}$ in.	"

If desired conduit boxes or watertight glands can be provided at an extra charge, see pages 23 and 24.

Unit System Switchboards. "Salford" switches combined with various attachments and accessories can be made to form complete unit switchboards. See Section X (1).

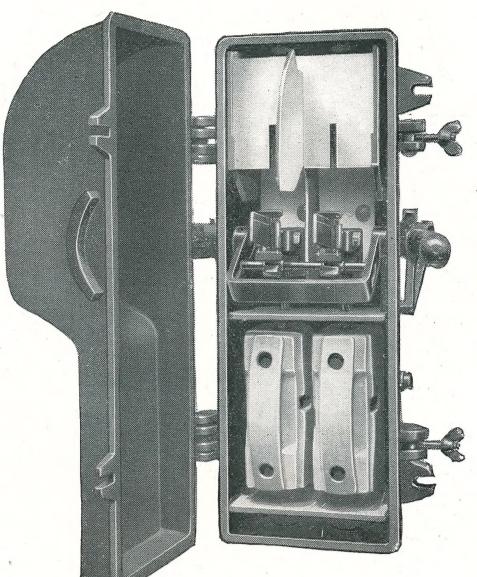
S.E.C.

"SALFORD"

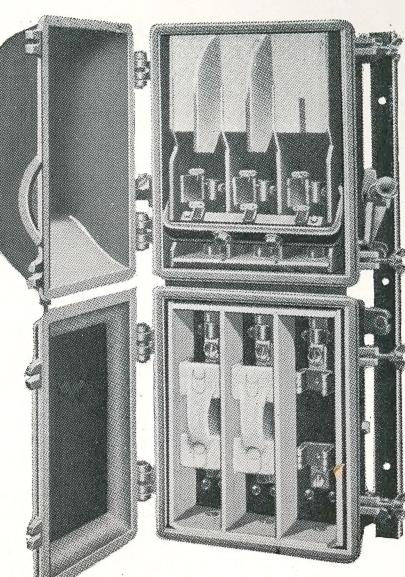
SWITCHES AND SWITCHES WITH FUSES.

FOR CIRCUITS UP TO 600 VOLTS.

(REGISTERED No. 572152.)



X 6215



X 6375

DOUBLE POLE.				TRIPLE POLE.			
Switch Only.				Switch with Fuses.			
Capacity. Amps.	Catalogue Number.	Approximate Weight.	Price, each.	Catalogue Number.	Approximate Weight.	Price, each.	Price, each.
50	X 6204	18 $\frac{1}{2}$ lbs.	8.42 £ s. d. 2 3 3	X 6214	39 lbs.	17.72 £ s. d. 3 19 3	5 16 9
75	X 6204 A	34	15.47 £ s. d. 3 8 9	X 6214 A	54 lbs.	24.60 £ s. d. 5 5 0	7 9 9
100	X 6205	50 $\frac{1}{2}$ lbs.	22.75 £ s. d. 4 19 6	X 6215	70 lbs.	31.80 £ s. d. 7 9 0	10 11 3
150	X 6205 A	60	27.00 £ s. d. 6 0 0	X 6215 A	96 lbs.	43.65 £ s. d. 12 6 6	12 6 6
200	X 6206	70	31.80 £ s. d. 6 16 0	X 6216	124 lbs.	56.75 £ s. d. 30 8 0	30 8 0
300	X 6372	130	59.10 £ s. d. 15 4 0	X 6373	250 lbs.	113.90 £ s. d. 43 4 0	43 4 0
400	X 6368	200	91.00 £ s. d. 27 12 0	X 6385	345 lbs.	157.00 £ s. d. 38 8 0	38 8 0

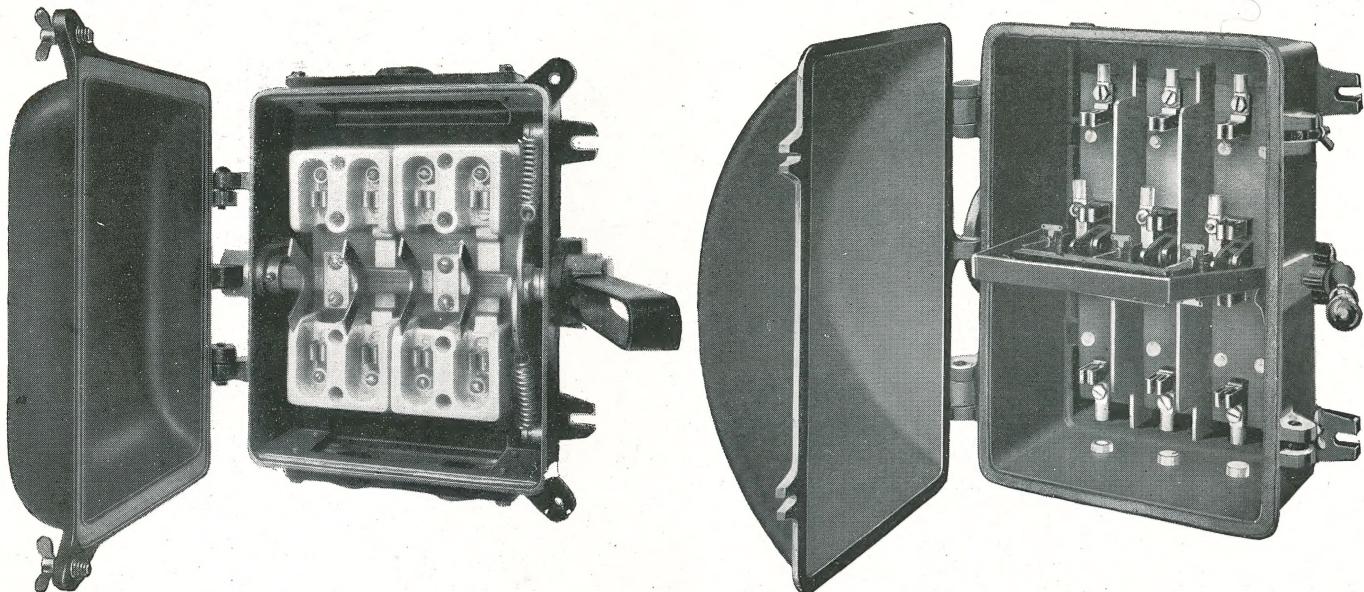
For dimension drawings, see page 36.

For attachments and accessories, see pages 22 to 24.

For UNIT System Switchboards embodying "Salford" Switches, see Section X (1).

G.E.C.

DOUBLE-THROW OR CHANGE-OVER SWITCHES.



X 6091

X 6458

The construction of all sizes up to and including 60 amp. follows generally on the lines of the "D.B." range, excepting that the action is quick-break only; the quick break spring arm in the full-on position passes over the dead centre and exerts a hold-on influence. The cases are tapped for conduit and in the 30 and 60 amp. the ends are detachable and reversible.

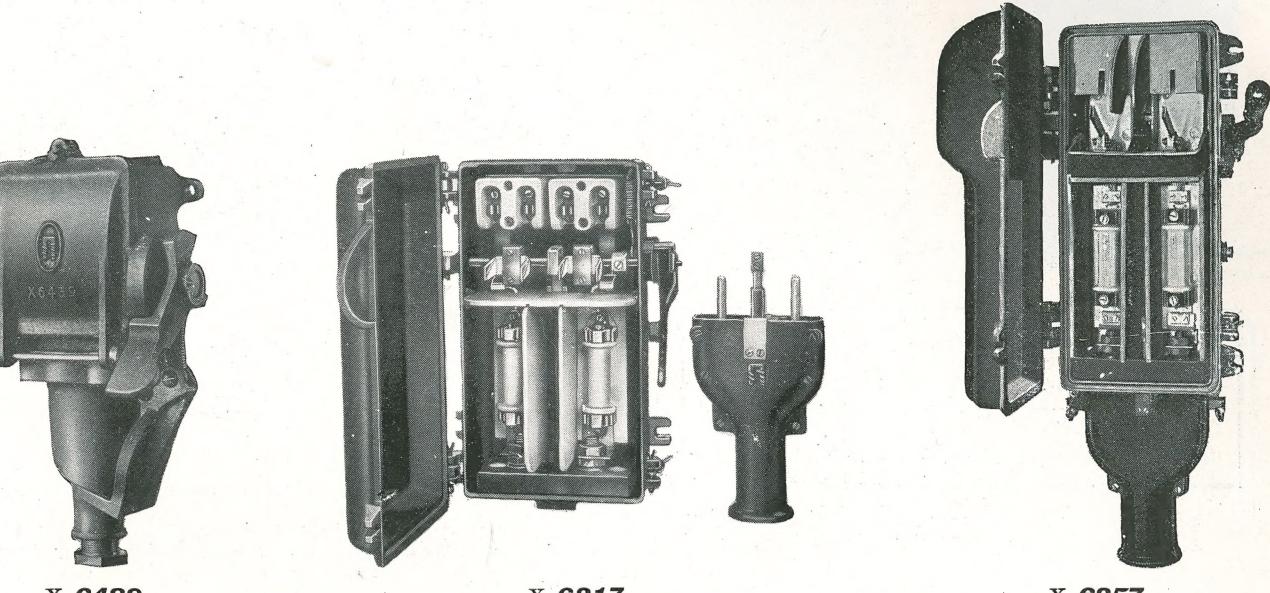
The 100 amp. size consists of a dead-hinge " Witton " type switch, externally operated ; the cast-iron case is drilled with plain holes, fitted with wood bushes and situated as nearly as possible opposite the sweating sockets.

In all sizes a definite "Off" stop is provided for the handle and the switch movement interlocked with the lid of the case, so that it is impossible to open the case with the switch closed, or to close the switch when the case is open, as the blades are dead until "Off".

Capacity.		DOUBLE POLE.							TRIPLE POLE.						
Amps.	Volts.	Catalogue No.	Approx. Overall Dimensions.			Approx. Weight.		Price, each.	Catalogue No.	Approx. Overall Dimensions.			Approx. Weight.		Price, each.
			Height	Width	Depth	lbs.	kilos.			Height	Width	Depth	lbs.	kilos.	
15	250	X 6367	ins.	ins.	ins.			£ s. d.	X 6369	ins.	ins.	ins.			£ s. d.
10	500		7½	6½	4	6½	2.78	16 0		7½	8¾	4	8½	3.85	1 1 9
30	500	X 6091	9½	10¾	4½	14	6.35	1 11 3	X 6094	10½	12	4½	21½	9.75	2 9 0
60	500	X 6092	11½	11½	5½	20	9.06	2 1 0	X 6095	12½	14¾	5½	30½	13.72	3 4 0
100	600	X 6383	20¼	15½	12¾	65	29.55	8 11 3	X 6458	20½	18½	12¾	100	45.4	12 16 0

S.E.C.

SWITCHES AND SWITCHES WITH FUSES WITH INTERLOCKED PLUGS.



X 6439

X 6217

X 6257

This range of combined switch plugs and switch fuse plugs consist of modified "D.B. Junior," "Twinbreak" and "Salford" gear, embodying substantial plugs which in each case are so interlocked with the switch movement as to prevent the plug being inserted or withdrawn until the switch is in the "Off" position. Each plug is fitted with an additional pin for earthing purposes and embody a device to prevent reversal of polarity. The whole of the apparatus complies fully with Home Office Factory Regulations.

DOUBLE POLE.									
Capacity.		Catalogue Number.	Type.	Approx. Dimensions.			Approx. Weight.		Price, each.
Amps.	Volts.			Height	Width	Depth	lbs.	kilos.	
15	250	X 6439	"D.B. Junior," switch and plug only (weatherproof).	ins. 11	ins. 6	ins. $5\frac{1}{2}$	9	4.08	£ s. d. 1 12 0
10	500								
20/30	500	X 6217	"Twinbreak" switch, with fuses and plug	$17\frac{3}{4}$	$8\frac{1}{2}$	$4\frac{3}{4}$	21	9.52	4 16 0
30/40	500	X 6219	"Twinbreak" switch, with fuses and plug	$21\frac{1}{2}$	$9\frac{1}{2}$	$6\frac{1}{2}$	29	13.15	5 6 0
50	600	X 6257	"Salford" switch, with fuses and plug (weatherproof).	$27\frac{1}{4}$	$13\frac{1}{2}$	$9\frac{3}{4}$	50	22.5	13 12 0

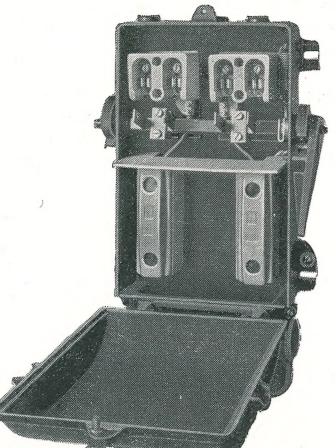
S.E.C.

"SHEFFIELD" SWITCHES
FOR COMBINED LIGHTING AND HEATING SERVICES.



X 6398

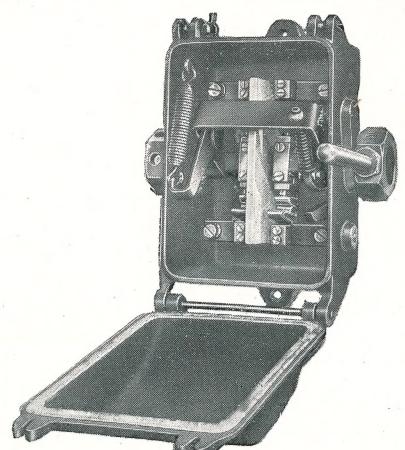
For use in situations where it is desired to run both lighting and heating circuits from the one incoming main service cable; by means of a small connector, which can be supplied fitted into the case between the two fuse units, it is possible to divide the load on two-phase A.C. or 3-wire D.C. systems. The case is provided at the bottom with a sealing trough having three alternative entries for the incoming main cable.



X 6398

Capacity.		Cat. No.	Approx. Overall Dimensions.			Approx. Weight.		Price, each.
Amps.	Volts.		Height.	Width.	Depth.	Ibs.	kilos.	
30	250	X 6398	ins. 16	ins. 4 $\frac{1}{4}$	ins. 9 $\frac{1}{4}$	20 $\frac{1}{2}$	9.29	£ 1 15 3

LIMIT SWITCHES.



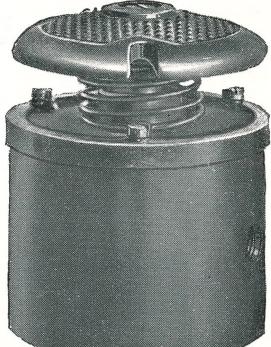
X 9139

To prevent the accidental overtravel of cranes, hoists, machine tools, etc., when controlled by solenoid operated switchgear. They are self-resetting and have a quick-make and break action. Can be supplied either "normally open" or "normally closed." The tappet rod can be placed on any side of either of the hexagonal carriers, allowing the switches to be operated from a number of different points.

Capacity	Amps.	Volts.	Cat. No.	Type.	Overall Dimensions.			Price, each.
					Hght.	Wdth.	Dpth.	
10	500	X 9138	Single Pole	ins. 8 $\frac{1}{2}$	ins. 8	ins. 5 $\frac{1}{2}$	13	5.9 3 9 0
10	500	X 9139	Double Pole	ins. 9 $\frac{3}{4}$	ins. 8	ins. 5 $\frac{1}{2}$	16	7.26 4 0 0

Cat. No.	Operation.	Approx. Dimen.		Approx. Weight.		Price, each.
		Hght.	Diam.	lb.	kilo.	
X 9141	Closes circuit when pressed	5 $\frac{1}{2}$	4 $\frac{1}{2}$	8 $\frac{3}{4}$	4.0	£ 2 10 0
X 9142	Opens one circuit and closes another when pressed	5 $\frac{1}{2}$	4 $\frac{1}{2}$	8 $\frac{3}{4}$	4.0	£ 2 14 0

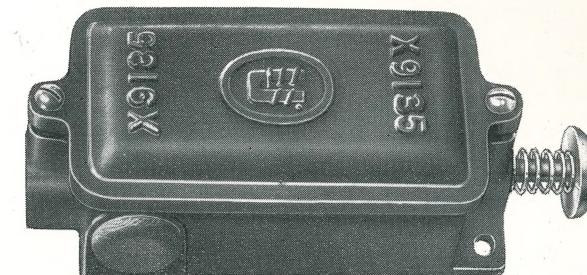
Specially suitable for the remote control of solenoid operated switchgear for Capstan Motors. Mounted in circular cast-iron cases, fitted with large diameter mushroom headed plunger. Suitable for 5 amps at 500 Volts A.C. or D.C.



X 9141

S.E.C.

GATE SWITCHES.



X 9135

For use in conjunction with lifts, doors or other gear which is electrically interlocked with solenoid operated switchgear. Made in two types, one to close the circuit when pressed and the other to open the circuit when pressed. For use on 250 volt circuits up to 1 ampere.

Cat. No.	Type.	Overall Dimensions.			Approx. Weight.		Price, each.
		Length.	Width.	Depth.	Ibs.	kilos.	
X 9135	Push to Make ...	ins. 6 $\frac{1}{2}$	ins. 2 $\frac{1}{2}$	ins. 2 $\frac{1}{2}$	2 $\frac{1}{4}$	1.12	s. d. 12 6
X 9136	Push to Break ...	ins. 6 $\frac{1}{2}$	ins. 2 $\frac{1}{2}$	ins. 2 $\frac{1}{2}$	2 $\frac{1}{4}$	1.12	s. d. 12 6

PUSH BUTTON SWITCHES.



X 9130

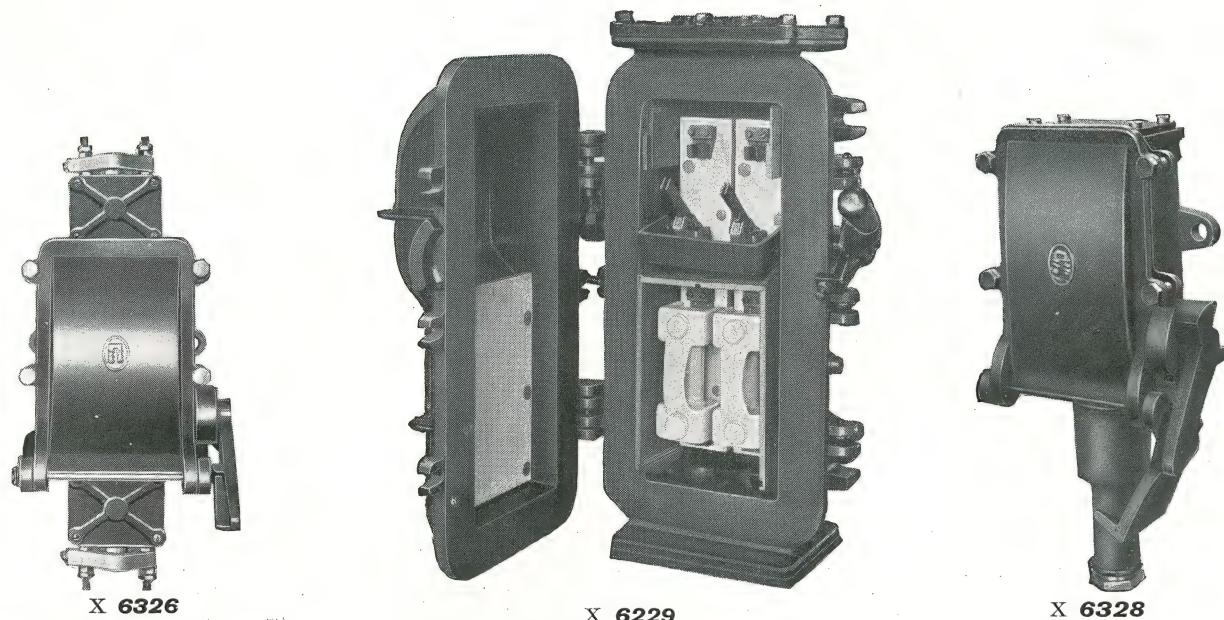
For use on circuits up to 500 volts, at currents up to 0.5 amp., or on 250 volts up to 1 amp.; suitable for the remote control of solenoid operated switchgear. The cases are weatherproof.

Cat. No.	Number of Buttons	Description.	Operation.	Approx. Overall Dimensions.			Approx. Weight.		Price, each.
				Hght.	Wth.	Dpth.	Ibs.	kilos.	
X 9130	1	"Start" ...	Push to Make ...	ins. 4	ins. 4	ins. 3 $\frac{9}{16}$	5	2.27	s. d. 16 6
X 9131	1	"Stop" ...	Push to Break ...	4	4	3 $\frac{9}{16}$	5	2.27	s. d. 16 6
X 9132	2	"Start" and "Stop" ...	1 Push to Make ... 1 Push to Break ...	5 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{9}{16}$	6	2.72	s. d. 1 2 6
X 9133	3	"Start, Stop and Reverse" or "Start, Stop and Inch" ...	2 Push to Make ... 2 Push to Break ... 1 Push to Make ...	7 $\frac{1}{2}$	4 $\frac{7}{8}$	3 $\frac{9}{16}$	8	3.62	s. d. 1 9 0
X 9134	3	"Start, Stop and Inch" ...	2 Push to Break* ... 1 Push to Make ...	7 $\frac{1}{2}$	4 $\frac{3}{8}$	3 $\frac{9}{16}$	8	3.62	s. d. 2 1 3
X 9137	1	"Inch" ...	Change over from Break to Make ...	4	4	4 $\frac{1}{4}$	5 $\frac{1}{2}$	2.48	s. d. 2 1 3

* X 9134. "Start" normally open, "Inch" and "Stop" normally closed. "Stop" button opens circuit when pressed. "Inch" button when pressed opens "Inching" circuit, and "Stop" circuit and closes the "Start" circuit.

G.E.C.

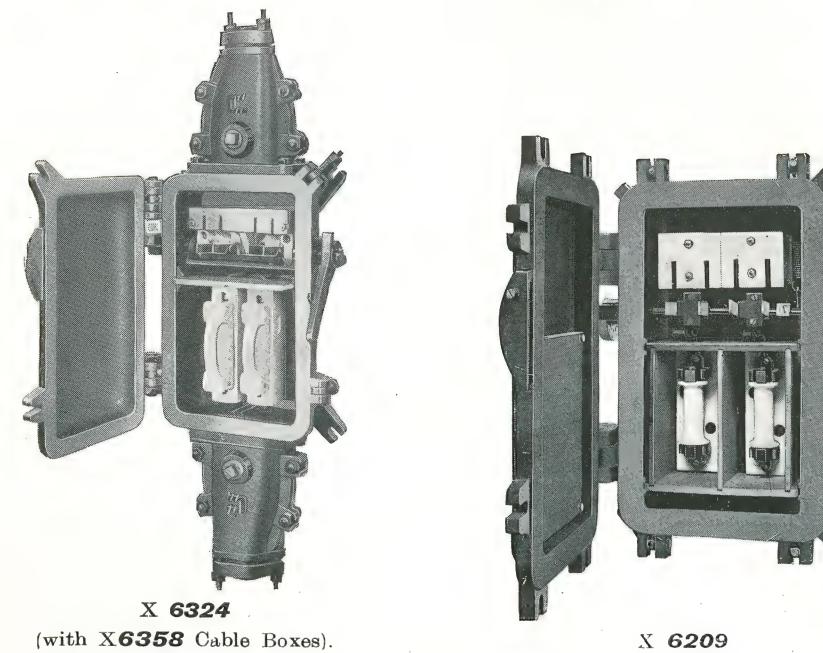
FLAME-PROOF SWITCHGEAR.



X 6326
(with X 6301 Cable Boxes).

X 6229
(Arc Shield and Barriers removed).

X 6328



X 6324
(with X 6358 Cable Boxes).

X 6209



X 6322

G.E.C.

**FLAME-PROOF SWITCHGEAR.
FOR USE IN FIERY MINES.**

These Switches and switches with fuses have been specially designed to meet the Home Office Regulations for the use of switchgear in fiery mines. They are of extremely robust construction, and are explosion and flame-proof, having wide machined flanges, which reduce to a safe temperature any escaping gases due to an internal explosion. The cover is in each instance interlocked with the switch, so that it is impossible to open the case when the switch is closed, or close the switch when the case is open. The covers are hinged and secured by means of hexagon nuts, ensuring even pressure round the joint, and the cases are arranged to take special flame-proof glands, and cable dividing boxes by the use of which there is no exit for the products of an internal explosion, other than through the wide flanged joints.

SWITCHES WITH FUSES.

DOUBLE POLE.										
Capacity.		Catalogue Number.	Type.	Approx. Overall Dimensions.			Approx. Weight.		Price, each, excluding boxes or glands.	
Amps.	Volts.			Height.	Width.	Depth.	lbs.	kilos.		
15	250	X 6326	"D.B. Junior"	9	8	4½	15½	6·9	£ 1 9 0	
10/20	250	X 6324	"D.B."	12	8½	5½	30	13·6	3 1 6	
10/20	500	X 6325	"D.B."	12	8½	5½	30	13·6	3 11 0	
20/30	600	X 6209	"Twinbreak"	16½	12	6½	60	27·2	4 16 0	
40/50	600	X 6294	"Twinbreak"	19	14	8½	88	40	6 16 0	
50	600	X 6229	"Salford"	24	15½	9	120	54·4	11 10 6	
100	600	X 6308	"Salford"	43½	17½	12½	336	152·8	27 5 0	

TRIPLE POLE.										
Capacity.	Volts.	Catalogue Number.	Type.	Height.	Width.	Depth.	lbs.	kilos.	Price, each, excluding boxes or glands.	
20/30	600	X 6314	"Twinbreak"	16½	15½	8½	84	38·2	6 16 0	
40/50	600	X 6315	"Twinbreak"	20½	18	8½	94	42·7	9 12 0	
50	600	X 6287	"Salford"	26½	20½	11½	210	95·5	20 3 6	

SWITCHES WITH FUSES AND INTERLOCKED PLUGS.

These switches with fuses are of similar construction to the standard flame-proof type, but with the addition of specially designed plug and socket attachment with earthing connection. These plugs are so interlocked that they cannot be inserted or removed unless the switch is in the "off" position.

Capacity.		Catalogue Number.	No. of Poles.	Type.	Approx. Overall Dimensions.			Approx. Weight.		Price, each, excluding boxes or glands.
Amps.	Volts.				Height.	Width.	Depth.	lbs.	kilos.	
10	250	X 6328	2	"D.B. Junior"	13	8	4½	20	9·07	£ 2 15 6
50	600	X 6322	2	"Salford"	39	15½	11½	145	66	19 10 6
50	600	X 6323	3	"Salford"	41½	20½	11½	250	113·5	26 8 0

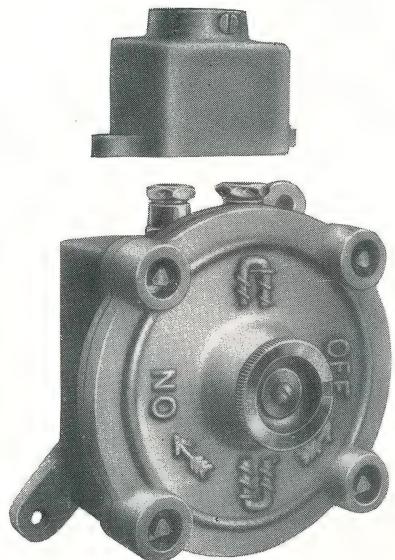
FLAME-PROOF CABLE DIVIDING BOXES.

Catalogue Number.	Catalogue Number of Switch for which used.	Price, each, including armour clamps.
X 6301	Bifurcating Box for X 6326 & X 6328 ...	£ 7 0
X 6358	Bifurcating " X 6324 & X 6325 ...	1 2 6
X 6359	Bifurcating " X 6209 & X 6294 ...	2 4 9
X 6349	Trifurcating " X 6314 & X 6315 ...	2 14 6
X 6338	Bifurcating " X 6229 & X 6322 ...	3 12 0
X 6339	Trifurcating " X 6287 & X 6323 ...	3 16 0
X 6348	Bifurcating " X 6308 ...	4 16 0

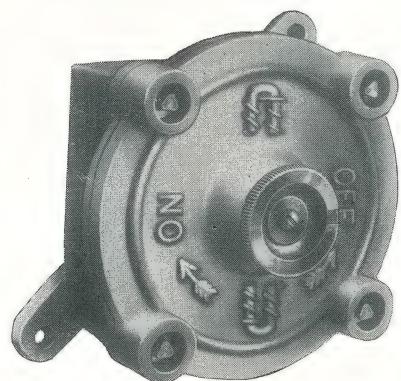
For flame-proof glands, see page 24.

5 AMP. FLAME-PROOF SWITCH.

FOR USE IN SITUATIONS WHERE PETROL VAPOUR OR OTHER
INFLAMMABLE GASES ARE PRESENT.



X 6701



X 6702

This is a 5-amp. S.P. quick-make and break tumbler switch enclosed in a strong galvanised cast-iron case and operated by an external handle passing through a flame-proof gland in the lid. The case is provided with a machined flange joint $\frac{1}{4}$ in. wide, and the lid is secured by shrouded bolts which can be turned only by means of a special key, preventing interference by unauthorised persons.

The box can be drilled to take flame-proof glands for use with wire armoured cables. When conduit is used, special provision is made to accommodate this whilst ensuring that the only exit for the products of an internal explosion is through the cooling surfaces of the machined flange between the case and the lid. This is achieved by means of a conduit box fitting over the flame-proof glands (for single V.I.R. Cables) which are screwed into the case. This conduit box is provided with a clearance hole so that it can be run up the conduit, allowing access to the glands for tightening up after connecting. The conduit box is then fixed to the case by two screws and the conduit held rigidly in position by means of a clamping screw.

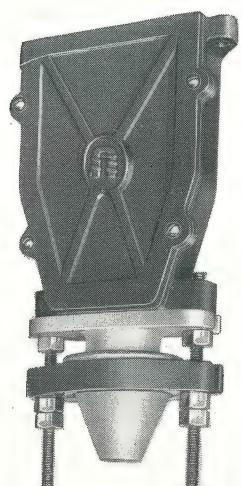
Two glands are normally provided in X 6701 illustrated above, but space is available for a third when required. The four sides of the switch case are each suitable for accommodating a conduit box and glands and the case can thus be used as "Through" or "Angle" in addition to the standard "Terminal" type.

Catalogue No.	Description.	Price, each.
X 6701	Switch with Conduit Box and two X 6709 Glands ..	18 6
X 6702	Switch only (plain undrilled case) ..	15 3
X 6703	Conduit Boxes for above ..	1 6
X 6709	Flame-proof Glands for single core V.I.R. Cables (diameter of bore, $\frac{1}{4}$ in.) ..	9

Flame-proof Glands for use with Armoured Cables, etc., Prices on application.

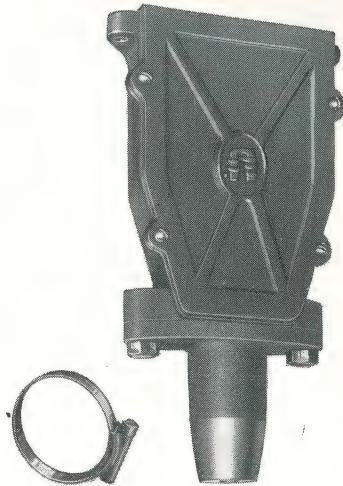
Keys for use with above Switches ... 6d. each.

CABLE BOXES AND GLANDS FOR "DB" SWITCHGEAR.



X 6505

(With Wire Armour Clamp and Wiping Gland.)



X 6505

(With Tape Armour Clamp and Wiping Gland.)

These Cable boxes are designed to accommodate Twin or Three-Core Paper Insulated cables, and for attachment to the top or bottom of the cases of the "DB" range of switchgear shown on pages 5 to 9 of this catalogue.

The boxes are of cast-iron and have removable fronts to give easy access for wiring and compound filling. Sweating type connections are supplied for the boxes for switchgear of 30 amps. and upward.

Suitable wiping glands and armour clamps can also be supplied at the extra prices given below.

FOR DOUBLE POLE SWITCHGEAR.						
Catalogue Number.	Size of Switch. Amps.	Suitable for Switch or Switch Fuse Catalogue No.	Price each.	Extra for Gland suitable for	Wire Armour Clamp, Non-Wiping.	Wire Armour Clamp and Wiping Gland.
X 6501	15	Y 3020	1 3	s. d.	2 3	—
X 6503	20	X 3010	1 3	—	2 3	—
X 6505	30	X 6081, X 6085	7 0	4 0	8 6	8 0
X 6507	50/60	X 4404, X 4412	8 9	4 9	8 6	8 0

FOR TRIPLE POLE SWITCHGEAR.						
Catalogue Number.	Size of Switch. Amps.	Suitable for Switch or Switch Fuse Catalogue No.	Price each.	Extra for Gland suitable for	Wire Armour Clamp, Non-Wiping.	Wire Armour Clamp and Wiping Gland.
X 6511	15	Y 3022	1 6	s. d.	2 3	—
X 6513	20	X 3012	1 6	—	2 3	—
X 6515	30	X 6083, X 6087	8 9	4 0	8 6	8 0
X 6517	50/60	X 4424, X 4432	10 0	4 9	8 6	8 0

For Cable Boxes for 60 amp. Switch Fuses X 4414/34 and 100 amp. Switches X 4405/25, and Switches with fuses X 4415/35,
see Catalogue Nos. X 6461/5 on page 23.

G.E.C.

ATTACHMENTS AND ACCESSORIES.



X 8200/4
"F" Type Ammeter
Attachment.



X 6239
"D" Type Ammeter Attachment.



X 6685
Busbar Chamber.

This consists of a fine-grained cast-iron box with removable front containing copper busbars mounted on suitable insulators with connections to switch or ammeter terminals. Bolts for securing the case to that of the ammeter or switch are provided.

Size.	DOUBLE POLE.				TRIPLE POLE.			
	Catalogue Number.	Approximate Weight.	Price, each.	Catalogue Number.	Approximate Weight.	Price, each.		
amps. 50	X 6685	lbs. 66	kilos. 29.7	£ s. d. 3 7 3	X 6705	lbs. 82	kilos. 37	£ s. d. 5 1 0
100	X 6686	80	36.0	3 17 0	X 6706	100	45	5 15 3
200	X 6687	92	41.5	4 8 0	X 6707	120	54	6 14 6

For Busbar chambers provided with fronts to accommodate an ammeter an extra charge of 10% is made, exclusive of ammeter.

"D" TYPE AMMETER ATTACHMENT.

This is designed to accommodate a standard front connected 6in. dial Moving Iron Ammeter for currents not exceeding 400 amperes. The instrument is enclosed in a cast-iron case with plate-glass window. That end of the attachment not fitted to the Switch is closed and is drilled to accommodate wooden cable bushes or watertight glands.

Size.	DOUBLE POLE.				TRIPLE POLE.			
	Catalogue Number.	Approximate Weight.	Price, each,	(including Ammeter)	Catalogue Number.	Approximate Weight.	Price, each,	(including Ammeter)
amps. 50	X 6238	lbs. 28	kilos. 12.7	£ s. d. 4 17 0	X 6241	lbs. 32	kilos. 14.5	£ s. d. 5 0 0
100	X 6239	32	14.5	5 0 0	X 6242	36	16.32	5 3 3
200	X 6240	38	17.2	5 5 9	X 6243	40	18.1	5 9 0

"F" TYPE AMMETER ATTACHMENT.

This ammeter attachment complies with the Home Office Regulations for factories which call for all live metal to be shielded. The object of this attachment is to enable an ordinary back connection ammeter to be used without the necessity of enclosing the whole in a large iron case. It is so arranged that the back terminals are covered in and allows of its being screwed to a starter box, distribution board, ironclad switch or circuit breaker. The standard arrangement accommodates one G.E.C. 6 inch dial instrument.

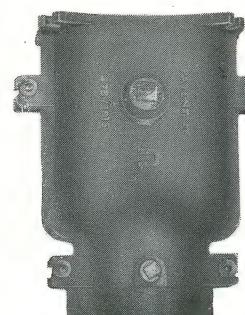
Size.	DOUBLE POLE.				TRIPLE POLE.			
	Catalogue Number.	Price, each,	(including Ammeter).		Catalogue Number.	Price, each,	(including Ammeter).	
amps. 50	X 8200	£ s. d. 3 16 0			X 8210	£ s. d. 3 19 3		
100	X 8202	3 19 3			X 8212	4 2 6		
200	X 8204	4 5 0			X 8214	4 8 0		

For 300 and 400 ampere sizes, prices on application.

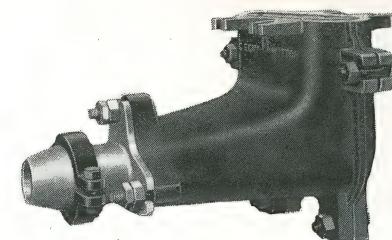
The above prices do not include for assembly. For prices of complete Unit Switchboards, see Section X. (I.).
For dimension drawings, see page 37.

G.E.C.

ATTACHMENTS AND ACCESSORIES.



X 6467 Straight through.



X 6479 Right Angle



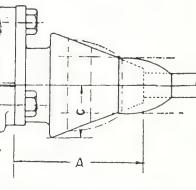
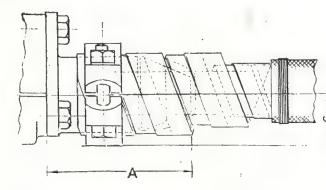
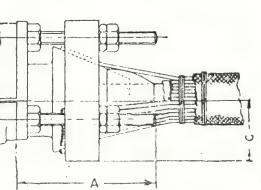
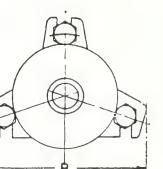
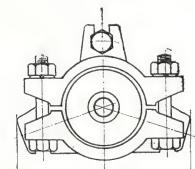
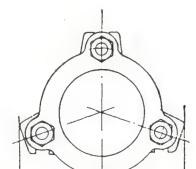
X 6244 Conduit Box.

The cable dividing boxes shown above were primarily designed for use with Salford Switches, but are equally suitable for attaching to Distribution Fuse Boards, etc. They are of cast-iron built in two parts to facilitate connecting up. A wood bush and mechanical clamp type internal fittings are provided. Clamps and glands for armoured and lead covered cables can be attached; particulars of these are given below.

Size and Type of Switches.	Size of Gland which can be fitted, see below.	CABLE DIVIDING BOXES.				CONDUIT BOXES.	
		Straight Through type.		Right Angle type.		Catalogue Number.	Price, each.
50 amp. D.P.	B	X 6461	£ s. d. 1 7 9	X 6471	£ s. d. 1 12 0	X 6244	s. d. 3 9
50 " T.P.	B	X 6462	1 1 0	X 6473	1 18 6	X 6247	5 9
100 " D.P.	C	X 6463	1 2 6	X 6475	2 5 0	X 6245	6 6
100 " T.P.	C	X 6465	1 5 9	X 6477	2 16 0	X 6248	9 9
200 " D.P.	D	X 6467	1 12 9	X 6479	2 13 0	X 6273	11 3
200 " T.P.	D	X 6469	2 1 9	X 6481	3 9 0	X 6280	16 0

For dimension drawings of Conduit Boxes, see page 37.

COMBINED ARMOUR CLAMPS AND WIPING GLANDS.



Size	WIRE ARMOUR.						TAPE ARMOUR.						WIPING GLAND.						Price, each.	
	A	B	C	D	E	F	A	B	C	D	E	F	A	B	C	D	E	F	s. d.	
A	4	4 1/4	1 5/8	1 1/2	1 1/16	9/16	8 0	3 1/2	4 1/4	1 5/16	1 1/2	1 1/16	14 0	3 1/4	4 1/4	1 3/8	—	1 1/2	4 9	
B	5	5	1 1/8	1 1/8	1 1/2	9/16	10 0	4 1/8	5	1 1/2	1 1/2	1 1/2	14 3	4 1/8	5	1 3/8	—	1 1/8	6 6	
C	4 1/2	5 1/4	2	2 1/4	1 3/4	1 1/16	11 0	4 1/4	5 1/4	2 1/4	1 3/4	1 1/8	19 0	3 5/8	5 1/4	1 3/8	—	2 1/4	7 9	
D	5	6	2 1/2	3	2 5/16	1 1/2	13 3	5	6	2 1/2	3	2 5/16	1 1/2	1 4 9	4 1/4	6	2 2/8	—	3	1 1/16
E	6	7	2 2/8	3 1/2	2 2/3	1 8/16	18 0	5 7/16	7	2 7/16	3 1/2	2 2/3	1 3/4	1 19 9	4 13/16	7	2 2/8	—	3 1/2	12 6

D—Maximum size through Gland (Not Wiped). E—Maximum size through Gland (Wiped Joint).

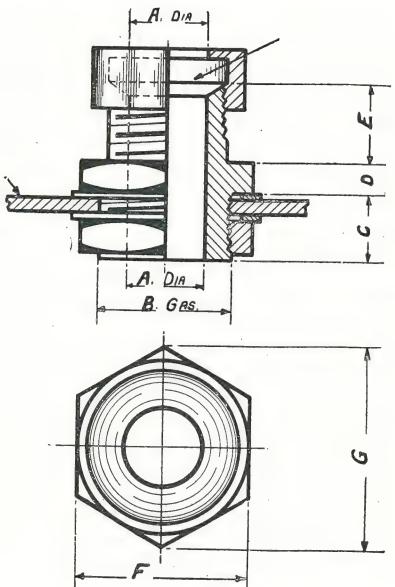
F—Minimum size through Gland (Wiped Joint).

The Brass Cone Wiping Glands are made with taper outlets so that they may be cut back to suit the diameter of cable used.

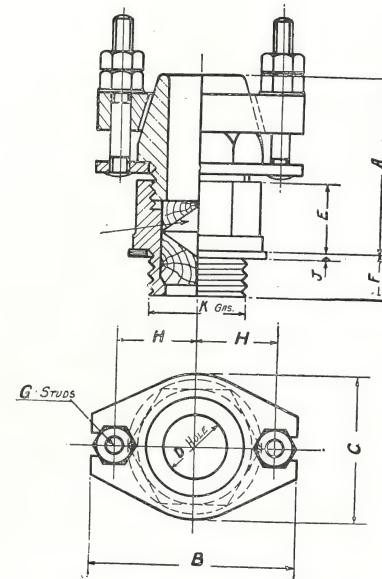
(X & Y) 24
ATTACHMENTS
AND ACCESSORIES.

G.E.C.

ATTACHMENTS AND ACCESSORIES.



WATERTIGHT GLANDS.

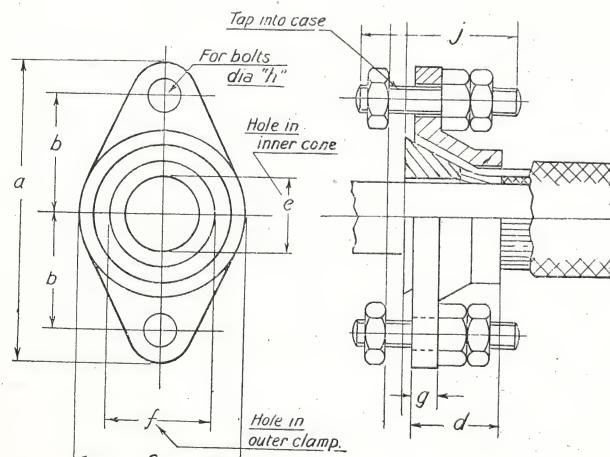


FLAMEPROOF GLANDS.

Cat. No.	A	B	C	D	E	F	G	Approx. Weight.	Price, each.	Cat. No.	A	B	C	D	E	F	G	H	J	K	Approx. Weight.	Price, each.
X 6250	ins.	ins.	ins.	ins.	ins.	ins.	ins.	lbs. kilos	s. d.	X 6700	2 $\frac{1}{2}$	2 $\frac{1}{2}$	11	2 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$
X 6251	7 $\frac{1}{2}$	11 $\frac{1}{2}$	11 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	.112	4 9	X 6704	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$
X 6252	10 $\frac{1}{2}$	14 $\frac{1}{2}$	14 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	.196	5 6	X 6708	2 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$
X 6253	13 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	.28	8 3	X 6712	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$	1$\frac{1}{2}$
X 6254	18 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	11 6	X 6714	4 $\frac{1}{2}$	5 $\frac{1}{2}$	3 $\frac{1}{2}$	1 $\frac{1}{2}$								
	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	11 6													

Flame proof glands can be fitted with special earth terminal at a small extra cost.

CLAMPS FOR SINGLE WIRE ARMoured CABLES.



X 8300/12

Cat. No.	Dia. Hole in Inner Cone (e)	Dia. Hole in Outer Clamp (f)	Dia. of Fixing Bolts. (h)	Centres of Fixing Bolts. (b+b)	Length of Fixing Bolts. (j)	Price, each.
X 8300	ins.	ins.	ins.	2	1 $\frac{1}{2}$	2 2
X 8301	11 $\frac{1}{16}$	15 $\frac{1}{16}$	1 $\frac{1}{4}$	2 $\frac{1}{2}$	1 $\frac{1}{2}$	2 2
X 8302	2 $\frac{1}{2}$	1	1 $\frac{1}{4}$	2 $\frac{1}{2}$	1 $\frac{1}{2}$	2 6
X 8303	1 $\frac{3}{8}$	1 $\frac{3}{16}$	1 $\frac{1}{4}$	3	1 $\frac{1}{2}$	2 9
X 8304	1 $\frac{1}{16}$	1 $\frac{1}{8}$	1 $\frac{1}{4}$	3 $\frac{1}{4}$	2	2 9
X 8305	1 $\frac{1}{4}$	1 $\frac{1}{16}$	1 $\frac{1}{4}$	3 $\frac{1}{4}$	2 $\frac{1}{2}$	3 0
X 8306	1 $\frac{9}{16}$	2	2	4 $\frac{1}{2}$	2 $\frac{1}{2}$	4 0
X 8307	1 $\frac{1}{8}$	2 $\frac{1}{8}$	2 $\frac{1}{8}$	4 $\frac{1}{2}$	2 $\frac{1}{2}$	4 0
X 8308	1 $\frac{1}{8}$	2 $\frac{1}{4}$	2 $\frac{1}{4}$	5	2 $\frac{1}{2}$	4 0
X 8310	2 $\frac{3}{8}$	2 $\frac{5}{8}$	2 $\frac{5}{8}$	5	2 $\frac{1}{2}$	5 9
X 8312	2 $\frac{3}{4}$	3 $\frac{3}{16}$	3 $\frac{1}{2}$	5 $\frac{7}{8}$	2 $\frac{3}{4}$	6 6

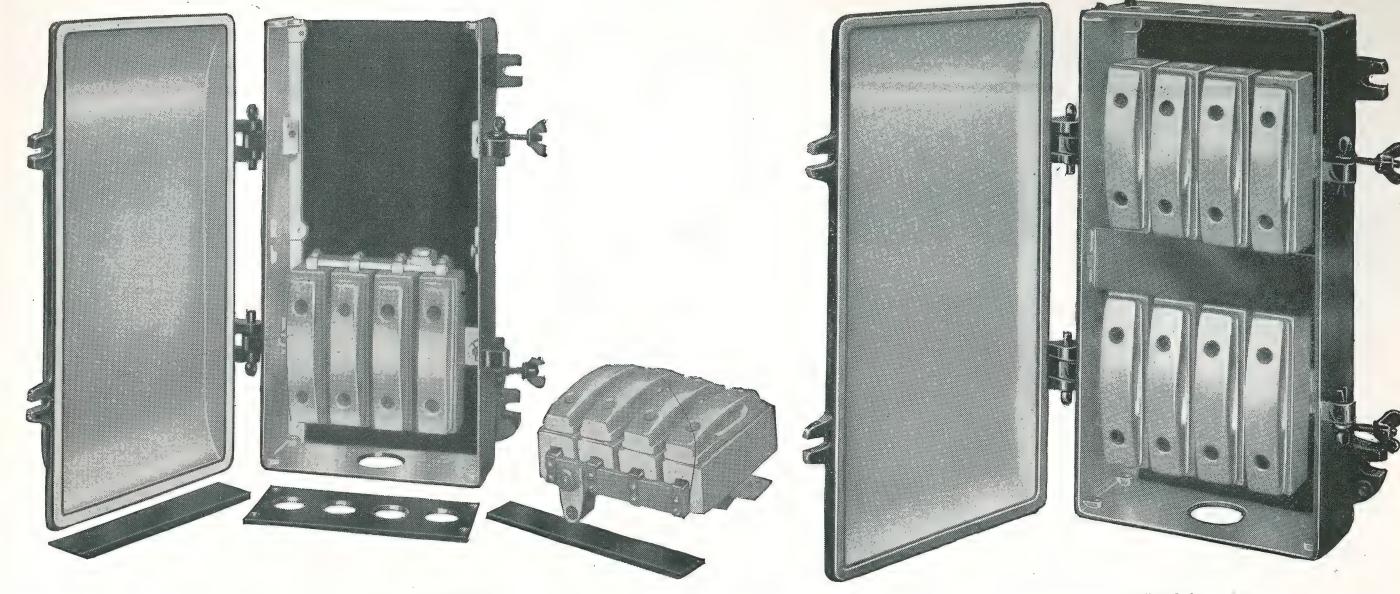
Further details on application.

G.E.C.

DISTRIBUTION FUSE BOARDS.

CHINA UNIT TYPE.

FOR CIRCUITS UP TO 500 VOLTS.



X 4611

(One bank of fuses and top plate removed).

This range of Home Office power distribution boards has been produced to meet the demand for a light compact and efficient board at a low cost. The fuse units which are those used in the Y2054 and Y2142/4 cut-outs are fixed to wrought iron straps and each bank of units can be readily removed to facilitate erection; the fuses are connected to substantial H.C. copper busbars by angle stampings secured by two screws. The main sweating sockets are provided with a shoulder engaging with the underside of the busbar, preventing any movement after being secured by the hexagon nut. All stampings, busbars and sweaters are tinned.

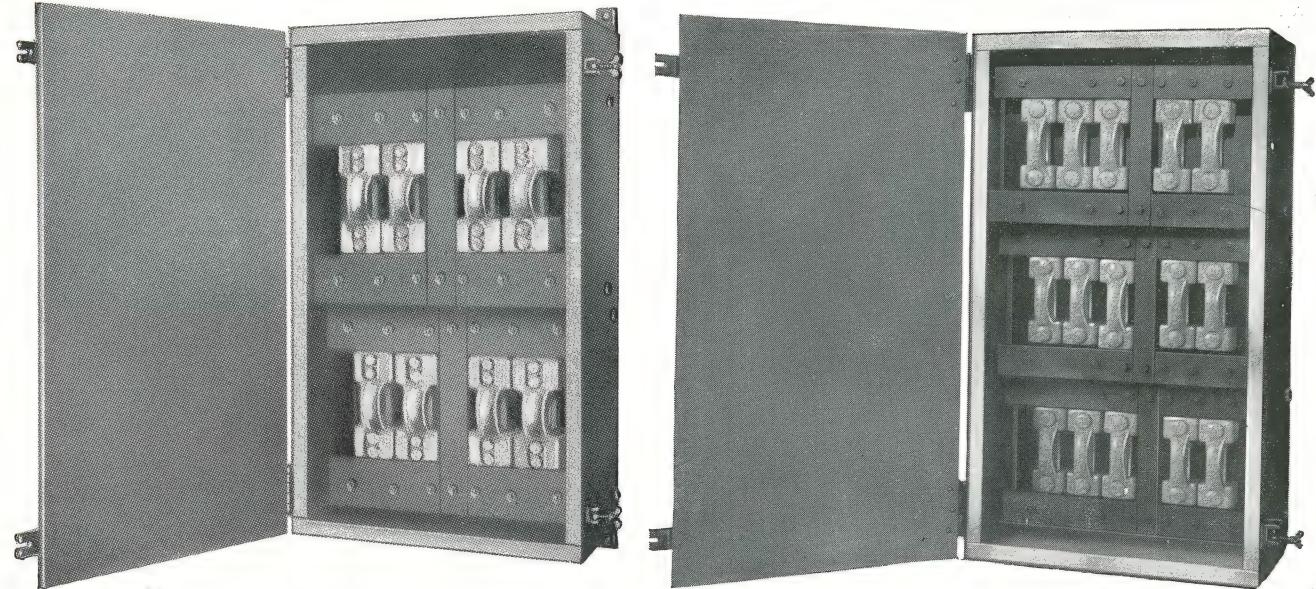
The weatherproof case is built up from best quality cast iron and steel plate, and the end plates can be readily removed for drilling. Watertight Glands, Cable Boxes, or Armour Clamps can also be fitted at an extra charge. The back of the case is lined with insulating material, and the cover is provided with a special lug for a padlock. The features of the board are ease of access, adequate clearances, and a minimum of time and labour required for erection.

DOUBLE POLE.							TRIPLE POLE.								
No. of Ways	Carrying Capacity	Catalogue Number.	Approx. Weight.		Standard Drillings.* Clearance Holes.		Price, each.	No. of Ways	Carrying Capacity	Catalogue Number.	Approx. Weight.		Standard Drillings.* Clearance Holes.		
			lbs.	kilos.	Inlet 1 hole	Outlet 1 per DP.way					lbs.	kilos.	Inlet 1 hole	Outlet 1 per DP.way	
2	amps	X 4600	27	12.22	ins.	ins.	£ 1 15 9	2	amps	X 4640	42	19.05	ins.	ins.	£ 2 13 9
30		X 4601	30	13.6	1 $\frac{9}{16}$	1 $\frac{9}{16}$	2 13 6	60		X 4641	52	23.6	1 $\frac{5}{16}$	1 $\frac{5}{16}$	3 10 6
60		X 4602	56	25.4	2 $\frac{1}{16}$	1 $\frac{9}{16}$	4 5 9	100		X 4642	87	39.46	2 $\frac{1}{16}$	1 $\frac{9}{16}$	6 9 0
3	amps	X 4605	29	13.15	1 $\frac{5}{16}$	1 $\frac{13}{16}$	2 1 9	30		X 4645	44	19.95	1 $\frac{9}{16}$	1 $\frac{13}{16}$	3 3 6
30		X 4606	33	14.96	1 $\frac{5}{16}$	1 $\frac{13}{16}$	3 7 6	60		X 4646	57	25.8	2 $\frac{1}{16}$	1 $\frac{9}{16}$	4 17 9
100		X 4607	62	28.12	2 $\frac{1}{16}$	1 $\frac{9}{16}$	4 15 3	100		X 4647	93	42.18	2 $\frac{1}{16}$	1 $\frac{9}{16}$	7 14 6
4	amps	X 4610	34	15.42	1 $\frac{9}{16}$	1 $\frac{13}{16}$	2 9 3	30		X 4650	47	21.31	1 $\frac{9}{16}$	1 $\frac{13}{16}$	3 16 3
30		X 4611	4												

G.E.C.

DISTRIBUTION FUSE BOARDS.

STEPPED TYPE.
FOR CIRCUITS UP TO 660 VOLTS.



X 8622

X 8724

Construction. Each board consists of two or three oiled slate panels equipped with Handguard cut-outs, and fixed to angle-iron battens. To facilitate connecting up, the panels are arranged at different distances from the back of the case. The wires for each pole are brought in at different levels, those for the lower set passing behind the upper panel. As all connections are arranged on the front of the panels, unnecessary bending of the cables and confusion of wiring is avoided.

To conform to Home Office Regulations, all live metal parts on the front of the panels are covered by slate insulating shields and dividing fillets are fitted between each Fuse. These shields can be readily removed when necessary for access to the terminals. Boards are complete with busbars, sweating sockets, etc.

Case. All cases are made of welded steel plate, with hinged solid lids and wing nut fastenings. Padlocks and keys can be provided at a slight extra charge.

Cable Insets. Plain clearance holes are arranged at the top of the case, in the most convenient positions for the incoming and outgoing cables. One hole is provided for the mains and one hole for each of the double pole ways, except where otherwise stated in footnote on page 27. Special drilling can be arranged to suit customers' requirements. Watertight glands, cable boxes and clamps for armoured cables can be supplied at an extra charge.

DOUBLE POLE.														
No. of Double Pole Ways.	Carrying Capacity.	Catalogue No.	Approx. Weight.		Drilling. Clearance Holes.		No. of Double Pole Ways.	Carrying Capacity.	Catalogue No.	Approx. Weight.		Drilling. Clearance Holes.		
			lbs.	kilos.	Inlet.	Outlet				lbs.	kilos.	Inlet.	Outlet	
2	Amps.	X 8600	60	27.22	1 ⁵ / ₁₆	1 ¹³ / ₁₆	5	9 0	20	X 8624	84	38.1	1 ⁹ / ₁₆	1 ¹³ / ₁₆
			76	34.47	1 ⁵ / ₁₆	1 ¹³ / ₁₆	5	18 6	30	X 8625	122	55.34	2 ¹ / ₁₆	1 ¹³ / ₁₆
			93	42.18	1 ⁵ / ₁₆	1 ¹³ / ₁₆	7	12 0	50	X 8626	140	63.5	1 ⁹ / ₁₆	1 ¹³ / ₁₆
			111	50.35	1 ⁵ / ₁₆	1 ¹³ / ₁₆	8	17 9	75	X 8627	168	76.2	1 ⁹ / ₁₆	1 ¹³ / ₁₆
			133	60.33	2 ¹ / ₁₆	2 ¹ / ₁₆	10	0 0	100	X 8628	198	89.81	2 ¹ / ₁₆	2 ¹ / ₁₆
			175	79.38	1 ⁷ / ₈ *	2 ¹ / ₁₆	12	16 0	150	X 8629	252	115.4	2 ³ / ₁₆ *	2 ¹ / ₁₆
			210	95.25	1 ⁷ / ₈ *	1 ⁷ / ₈ *	14	16 0	200	X 8630	305	138.5	2 ¹ / ₄ *	1 ⁷ / ₈ *
			70	31.75	1 ⁵ / ₁₆	1 ¹³ / ₁₆	6	11 3	20	X 8632	95	43.09	1 ⁹ / ₁₆	1 ¹³ / ₁₆
3	Amps.	X 8609	86	39.00	1 ⁵ / ₁₆	1 ¹³ / ₁₆	7	4 0	30	X 8633	138	62.6	2 ¹ / ₁₆	1 ¹³ / ₁₆
			104	47.17	1 ⁹ / ₁₆	1 ¹³ / ₁₆	9	12 0	50	X 8634	158	71.67	1 ⁹ / ₁₆	1 ¹³ / ₁₆
			125	56.70	1 ³ / ₈ *	1 ⁹ / ₁₆	11	4 0	6	X 8635	190	86.48	1 ⁹ / ₁₆	1 ¹³ / ₁₆
			150	68.00	1 ⁷ / ₈ *	2 ¹ / ₁₆	12	13 0	100	X 8636	224	101.6	2 ³ / ₁₆ *	2 ¹ / ₁₆
			200	90.70	1 ⁵ / ₁₆	2 ¹ / ₁₆	16	11 3	150	X 8637	302	137.0	2 ¹ / ₄ *	2 ¹ / ₁₆
			238	108.00	2 ³ / ₁₆ *	1 ⁷ / ₈ *	19	1 0	200	X 8638	364	165.5	2 ¹ / ₄ *	1 ⁷ / ₈ *
			75	34.01	1 ⁵ / ₁₆	1 ¹³ / ₁₆	7	13 9	20	X 8640	110	49.9	1 ⁹ / ₁₆	1 ¹³ / ₁₆
			105	47.63	2 ¹ / ₁₆	1 ¹³ / ₁₆	8	9 9	30	X 8641	160	72.57	1 ³ / ₈ *	1 ¹³ / ₁₆
4	Amps.	X 8616	124	56.25	1 ⁵ / ₁₆	1 ¹³ / ₁₆	11	12 6	50	X 8642	190	86.18	1 ⁹ / ₁₆	1 ¹³ / ₁₆
			149	67.58	1 ³ / ₈ *	1 ¹³ / ₁₆	13	10 6	7	X 8643	218	98.88	1 ⁹ / ₁₆	1 ¹³ / ₁₆
			178	80.74	1 ⁷ / ₈ *	2 ¹ / ₁₆	15	5 9	100	X 8644	255	116.0	2 ³ / ₁₆ *	2 ¹ / ₁₆
			237	107.5	2 ³ / ₁₆ *	2 ¹ / ₁₆	20	5 0	150	X 8645	335	152.0	2 ¹ / ₄ *	2 ¹ / ₁₆
			284	129.0	2 ¹ / ₄ *	1 ⁷ / ₈ *	23	4 0	200	X 8646	405	184.0	2 ¹ / ₄ *	1 ⁷ / ₈ *
			75	34.01	1 ⁵ / ₁₆	1 ¹³ / ₁₆	7	13 9	20	X 8640	110	49.9	1 ⁹ / ₁₆	1 ¹³ / ₁₆
			105	47.63	2 ¹ / ₁₆	1 ¹³ / ₁₆	8	9 9	30	X 8641	160	72.57	1 ³ / ₈ *	1 ¹³ / ₁₆
			124	56.25	1 ⁵ / ₁₆	1 ¹³ / ₁₆	11	12 6	50	X 8642	190	86.18	1 ⁹ / ₁₆	1 ¹³ / ₁₆
			149	67.58	1 ³ / ₈ *	1 ¹³ / ₁₆	13	10 6	7	X 8643	218	98.88	1 ⁹ / ₁₆	1 ¹³ / ₁₆

For dimension drawings, see page 39.

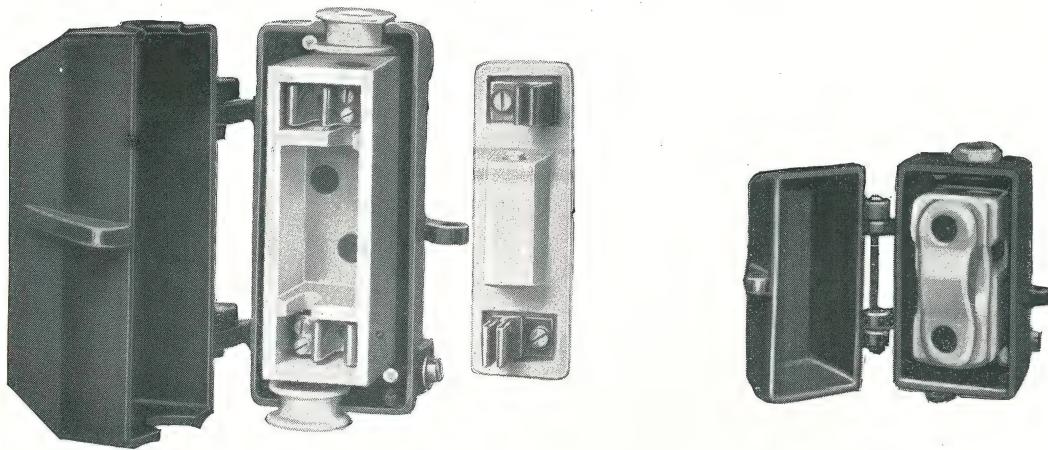
G.E.C.

DISTRIBUTION FUSE BOARDS.

STEPPED TYPE.
FOR CIRCUITS UP TO 660 VOLTS.

DOUBLE POLE.														
No. of Double Pole Ways.	Carrying Capacity.	Catalogue No.	Approx. Weight.		Drilling. Clearance Holes.		Price, each.	No. of Double Pole Ways.	Carrying Capacity.	Catalogue No.	Approx. Weight.		Drilling. Clearance Holes.	
			lbs.	kilos.	Inlet.	Outlet					lbs.	kilos.	Inlet.	Outlet
8	amps.	X 8648	124	56.25	2 ¹ / ₁₆	1 ¹³ / ₁₆	12	8 0	20	X 8672	165	74.84	1 ³ / ₈ *	1 ¹³ / ₁₆
			185	83.91	1 ³ / ₈ *	1 ¹³ / ₁₆	13	12 0	30	X 8673	240	109.0	1 ⁷ / ₈ *	1 ¹³ / ₁₆
			216	97.97	1 ⁷ / ₈ *	1 ¹³ / ₁₆	20	1 9	50	X 8674	280	127.3	2 ³ / ₁₆ *	1 ¹³ / ₁₆
			260	118.0	2 ³ / ₁₆ *	1 ¹								

G.E.C.
SINGLE POLE CUT-OUTS.
HOME OFFICE TYPE.
FOR CIRCUITS UP TO 500 VOLTS.

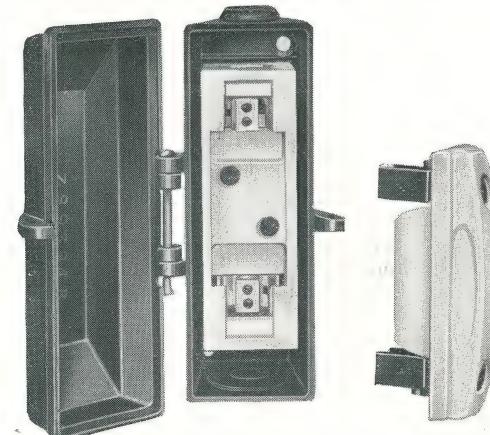


Y 2054

An inexpensive range of Home Office type single pole cut-outs being especially suitable for House Services, etc., where a thoroughly reliable cut-out is required at a low cost. In the 15 amp. size the fuse holder is that used in the Y 3020 on page 9, with the same base contacts, in the 20 and 30 amp. size the base contacts are solid brass blocks of ample area, fitted with headed pinching screws, and are well shrouded by the porcelain walls. The fuse holder contacts are of hard drawn H.C. copper of suitable form to ensure perfect contact. The fuse wires are threaded through asbestos tubes.

Carrying Capacity. Amps.	Catalogue Number	Overall Dimensions.			Length of Break.	Approx. Weight.	Price, each.	Spare Fuse Holders.
		Length.	Width.	Depth.				
15	Y 2049	ins. 3½	ins. 3	ins. 2½	ins. 1½	0.56	s. d. 1 9	s. d. 0 9
20	Y 2053	5	3¾	2½	2½	0.9	2 9	1 3
30	Y 2054	5½	3¾	3	2½	1.36	3 3	1 6

Y 2049



Y 2140

A very robust form of ironclad cut-out for House Services and Industrial lighting and power circuits. The fuse-holder contacts are self-aligning solid brass blocks having large cooling capacity. The base contacts are adequately shielded and are of hard drawn H.C. copper, with brass terminal blocks, fitted with two pinching screws. The fuse wire passes through an asbestos tube and can be renewed in a few seconds. The ends of the cast iron cases are tapped for conduit and fitted with screwed insulating bushes—a great improvement on the loose bushes which are apt to be lost or broken.

Carrying Capacity. Amps.	Catalogue Number.	Approx. Overall Dimensions.			Length of Break	Approx. Weight.	Cases Tapped Electric Thread.	Price, each	Spare Fuse Holders.
		Length	Width	Depth					
30	Y 2140	ins. 6½	ins. 3	ins. 3¼	ins. 2½	3½	1.59	s. d. 4 3	s. d. 1 6
50	Y 2142	8	3½	3¾	3	4½	2.04	6 3	2 0
100	Y 2144	8½	4½	4½	3½	7½	3.28	1	8 6
									3 0

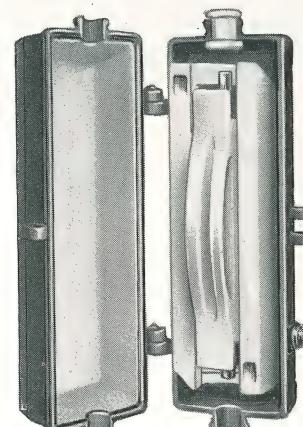
Sealing Troughs for use with the above on House Services. Prices on application.

G.E.C.
SINGLE POLE CUT-OUTS.

FOR CIRCUITS UP TO 600 VOLTS.

The interior of these cut-outs, which have been specially designed for use on circuits up to 600 volts, consists in all sizes up to and including 100 amperes of a detachable china handle, with heavy spring clip contacts; these engage with substantial brass base terminal blocks deeply recessed into a china base with protecting side walls. In the 200 and 300 amp. sizes handguard cut-outs are used as in the stepped type boards on pages 26/27, but in each case the fuses have a clear break of 6 inches and comply with the requirements of the Glasgow Corporation.

Carrying Capacity. Amps.	Catalogue No.	Overall Dimensions.			Length of Break.	Approx. Weight.	Price, each.
		Length	Width	Depth			
30	Y 2033	11½	5	3½	6	lbs. 7½ kilos. 3.46	£ s. d. 9 3
50	Y 2035	12½	5	3½	6	9½ 4.32	16 0
100	Y 2037	14½	6½	4½	6	17 7.72	1 4 0
200	Y 2039	17	7½	6½	6	30 13.65	2 9 6
300	Y 2076	21½	8½	7½	6	42 19.1	4 0 0

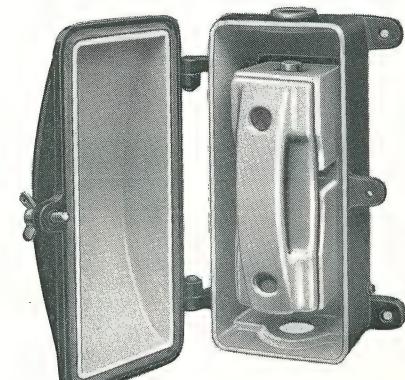


Y 2033

HOME OFFICE WATERTIGHT PATTERN.

Up to and including the 100 amp. size the fuse units are similar to those used in the Y2053 and the Y2140/4 series of cut-outs, shown on page 28; the larger sizes are standard handguard cut-outs, as used in stepped type boards on pages 26/27. The fuses are enclosed in substantial cast iron watertight cases with wing nut fastenings and a hemp gasket fitted between the lid and the case. External fixing lugs are provided and the case is drilled with a clearance hole each end, fitted with hardwood bushes. Watertight glands can be supplied at an extra charge, see page 24.

Carrying Capacity. Amps.	Catalogue No.	Overall Dimensions.			Length of Break.	Approx. Weight.	Price, each.
		Length	Width	Depth			
10/20	Y 2055	6½	3½	2½	2½	lbs. 5½ kilos. 2.5	£ s. d. 5 6
20	Y 2340	9½	3½	3½	2½	7 3.15	13 6
30	Y 2342	11½	3½	3½	3	8½ 3.94	15 0
50	Y 2344	13	4	4½	3½	13½ 6.07	16 0
100	Y 2346	11½	6½	5½	4	18½ 8.44	1 10 0
200	Y 2348	16	6½	7	4½	24 10.88	2 11 0
300	Y 2353	19½	9½	8	4½	63 28.35	3 19 6
400	Y 2354	22	10	9	4½	85 38.25	4 16 0



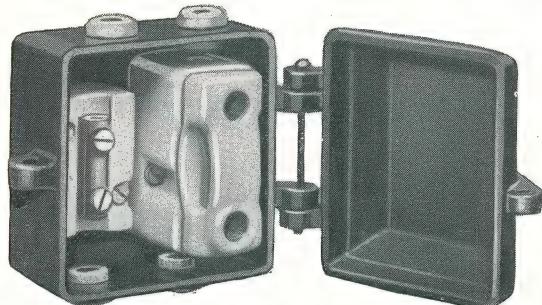
Y2346

NOTE — Y 2055 10/20 amp. is only suitable up to 500 volts.

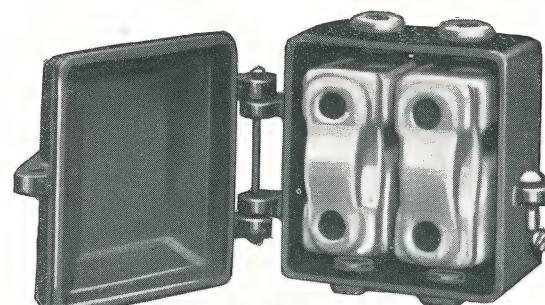
S.E.C.

DOUBLE POLE CUT-OUTS.

FOR CIRCUITS UP TO 250 VOLTS.



Y 2189 L



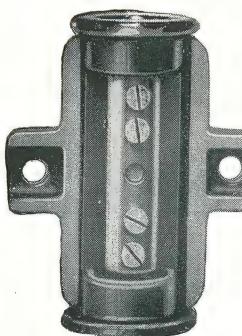
Y 2189

The fuse units in these cut-outs are similar to those used in the Y 2049 & Y 2053/4 on page 28, but enclosed in a single cast iron case, which is tapped for conduit, two holes top and bottom and fitted with screwed insulating bushes. These cut-outs are specially designed for services connected to overhead transmission lines by single conductors and where it is not required to seal off the ends of the incoming main cables.

DOUBLE POLE (Two Fuse Units).									
Carrying Capacity. Amps.	Catalogue No.	Approx. Overall Dimensions.			Len'th of Break.	Approx. Weight.		Price, each.	
		Length. ins.	Width. ins.	Depth. ins.		lbs.	kilos.	s. d.	s. d.
15	Y 2189	3½	4½	2½	1½	2½	1·02	3	3
20	Y 2193	5¼	4¾	2¾	2¾	3½	1·59	5	3
30	Y 2195	5¾	5	3½	2½	4½	2·04	6	3

ONE FUSE AND ONE LINK.								
15	Y 2189L	3½	4½	2½	1½	2½	1·02	3 3
20	Y 2193L	5¼	4¾	2¾	2¾	3½	1·59	5 0
30	Y 2195L	5¾	5	3½	2½	4½	2·04	6 0

NEUTRAL CONNECTORS.



Y 2052

These connectors provide an efficient and economical method of linking up the neutral conductor on three or four-wire services, etc., when used in conjunction with single pole service fuses mounted on a back board. They also have a variety of other uses. The case is of cast iron and the interior consists of a substantial brass connector with four clamping screws. The connector is mounted on a base of insulating material with fixed inlet and outlet bushes. They are packed in boxes of one dozen, complete with fixing screws.

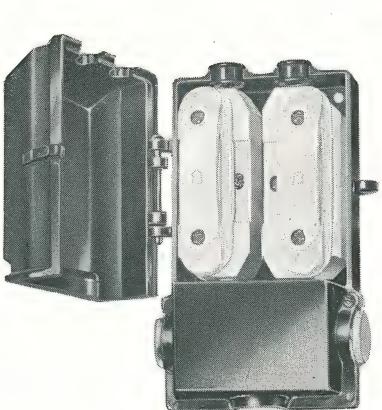


Interior only.

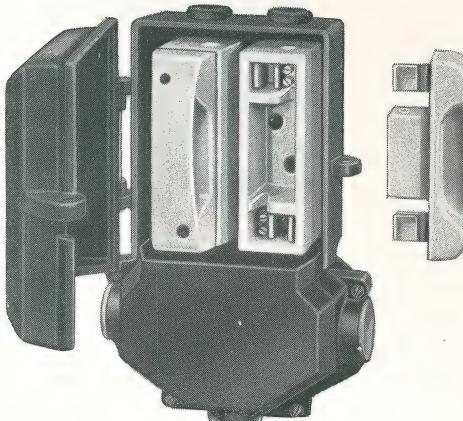
Capacity. Amps.	Catalogue No.	Approx. Overall Dimensions			Approx. Weight.	Price, per dozen.
		Length. ins.	Width. ins.	Depth. ins.		
Up to 25	Y 2052	2½	1½	1¾	½	1 2 6

S.E.C.

DOUBLE POLE CUT-OUTS.



Y 2192



Y 2410

This range of House Service Cut-outs consists of two Home Office pattern fuse units as used in Y 2049, Y 2053/4, Y 2142 single pole cut-outs (see page 28) enclosed in one cast iron box with combined sealing trough with three alternative cable entries.

The stock patterns are suitable for twin services, but fittings suitable for concentric cables either for bottom or side entry, also busbar fittings for converting to two way single pole splitter units can be provided. Also when necessary one fuse unit can be replaced by a neutral link.

FOR TWIN SERVICES.									
Carrying Capacity. Amps.	Catalogue No.	Approx. Overall Dimensions.			Length of Break.	Approx. Weight.		Price, each.	
		Length. ins.	Width. ins.	Depth. ins.		lbs.	kilos.	f. s. d.	s. d.
15	Y 2190	6½	4½	2½	1½	3	1·36	5	3
20	Y 2192	7½	5	2½	2½	4½	2·04	6	0
30	Y 2410	8½	5¾	3½	2½	6½	2·94	7	0
50	Y 2414	11	6	3¾	3	8½	3·98	11	9

FOR CONCENTRIC SERVICES.*

15	Y 2190 C.	6½	4½	2½	1½	3½	1·47	6	3
20	Y 2192 C.	7½	5	2½	2½	4½	2·16	7	0
30	Y 2410 C.	8½	5¾	3½	2½	6½	3·1	8	0
50	Y 2414 C.	11	6	3¾	3	9½	4·2	13	6

TWO-WAY SINGLE POLE.

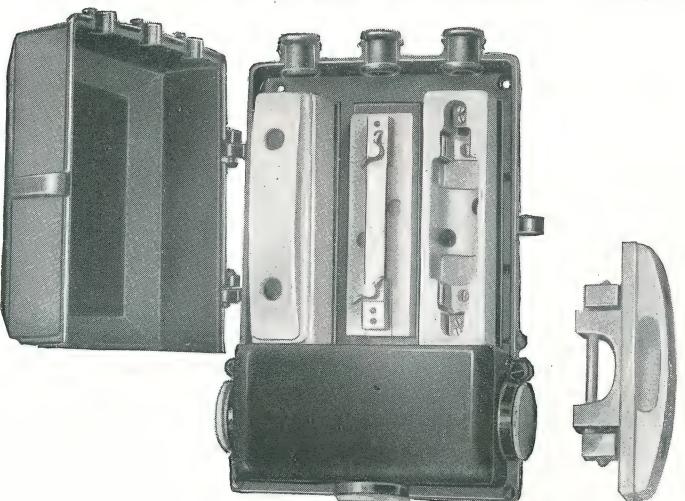
15	Y 2190 S.P.	6½	4½	2½	1½	3½	1·47	6	0
20	Y 2192 S.P.	7½	5	2½	2½	4½	2·16	6	9
30	Y 2410 S.P.	8½	5¾	3½	2½	6½	3·1	8	0
50	Y 2414 S.P.	11	6	3¾	3	9½	4·2	13	0

ONE FUSE AND ONE LINK.

15	Y 2190 L	6½	4½	2½	1½	3	1·36	5	0
20	Y 2192 L	7½	5	2½	2½	4½	2·04	5	9
30	Y 2410 L	8½	5¾	3½	2½	6½	2·94	6	9
50	Y 2414 L	11	6	3¾	3	8½	3·98	10	9

*When ordering for concentric services, please state if fittings for side or bottom entry are required.

G.E.C.
THREE AND FOUR POLE CUT-OUTS.



Y 2430

The above cut-out sets are similar in construction to the double pole form, on page 31. The stock patterns consist of two Home Office fuse units and one neutral link, and three fuses and one link for three-wire and four-wire services, respectively. They can also be supplied with all fuse units or with concentric service fittings or busbar fittings to convert to single pole multi-way sets, as required.

FOR THREE-WIRE SERVICES (Two Fuses, One Link).							
Carrying Capacity. Amps.	Catalogue No.	Approx. Overall Dimensions.			Length of Break ins.	Approx. Weight. lbs. kilos.	Price, each. £ s. d.
		Length. ins.	Width. ins.	Depth. ins.			
30	Y 2428	11 $\frac{1}{2}$	9 $\frac{1}{4}$	4	2 $\frac{1}{2}$	10 $\frac{3}{4}$	4.86 10 0
50	Y 2430	11 $\frac{1}{4}$	8 $\frac{1}{4}$	3 $\frac{7}{8}$	3	12	5.44 15 3
100	Y 2432	13 $\frac{3}{4}$	11 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{3}{8}$	19	8.22 1 8 0

*FOR THREE-WIRE CONCENTRIC SERVICES (Two Fuses, One Link).							
30	Y 2428 C.	11 $\frac{1}{2}$	9 $\frac{1}{4}$	4	2 $\frac{1}{2}$	12 $\frac{1}{2}$	5.5 11 6
50	Y 2430 C.	11 $\frac{1}{4}$	8 $\frac{1}{4}$	3 $\frac{7}{8}$	3	14	6.35 17 6
100	Y 2432 C.	13 $\frac{3}{4}$	11 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{3}{8}$	21	9.53 1 12 0

THREE POLE (Three Fuse Units).							
30	Y 2428 T.P.	11 $\frac{1}{2}$	9 $\frac{1}{4}$	3 $\frac{1}{2}$	2 $\frac{1}{2}$	11 $\frac{1}{2}$	5.25 12 0
50	Y 2430 T.P.	11 $\frac{1}{4}$	8 $\frac{1}{4}$	3 $\frac{7}{8}$	3	13 $\frac{1}{2}$	6.13 17 3
100	Y 2432 T.P.	13 $\frac{3}{4}$	11 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{3}{8}$	20 $\frac{1}{2}$	9.3 1 11 6

THREE WAY SINGLE POLE (Three Fuse Units).							
30	Y 2428 S.P.	11 $\frac{1}{2}$	9 $\frac{1}{4}$	3 $\frac{1}{2}$	2 $\frac{1}{2}$	12 $\frac{1}{2}$	5.5 15 0
50	Y 2430 S.P.	11 $\frac{1}{4}$	8 $\frac{1}{4}$	3 $\frac{7}{8}$	3	14 $\frac{1}{2}$	6.6 1 0 0
100	Y 2432 S.P.	13 $\frac{3}{4}$	11 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{3}{8}$	22	9.97 1 15 0

FOR FOUR-WIRE SERVICES (Three Fuses, One Link).							
30	Y 2438	11 $\frac{1}{2}$	9 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{1}{2}$	15	6.8 14 6
50	Y 2440	11 $\frac{1}{4}$	10 $\frac{1}{4}$	3 $\frac{7}{8}$	3	16 $\frac{1}{2}$	7.48 1 4 0

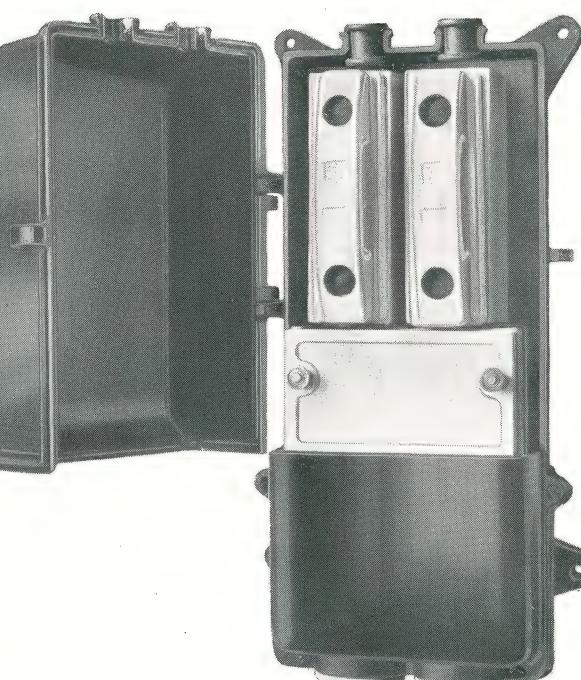
FOUR POLE (Four Fuse Units).							
30	Y 2438 F.P.	11 $\frac{1}{2}$	9 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{1}{2}$	16	7.25 16 6
50	Y 2440 F.P.	11 $\frac{1}{4}$	10 $\frac{1}{4}$	3 $\frac{7}{8}$	3	18	8.16 1 6 6

FOUR WAY SINGLE POLE (Four Fuse Units).							
30	Y 2438 S.P.	11 $\frac{1}{2}$	9 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{1}{2}$	18	8.16 19 6
50	Y 2440 S.P.	11 $\frac{1}{4}$	10 $\frac{1}{4}$	3 $\frac{7}{8}$	3	20	9.09 1 9 3

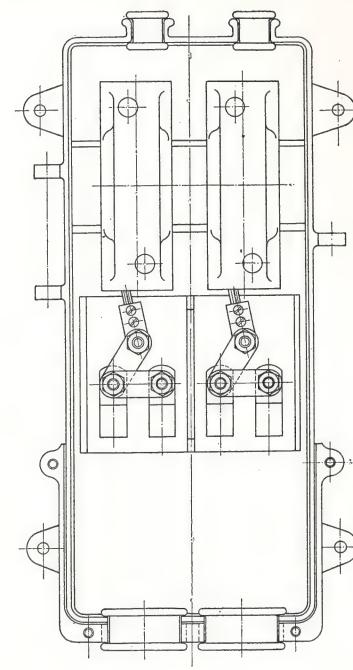
TWO WAY DOUBLE POLE (Four Fuse Units).							
30	Y 2438 D.P.	11 $\frac{1}{2}$	9 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{1}{2}$	18	8.16 19 6
50	Y 2440 D.P.	11 $\frac{1}{4}$	10 $\frac{1}{4}$	3 $\frac{7}{8}$	3	20	9.09 1 9 3

*When ordering for concentric services please state if fittings for side or bottom entry are required.

G.E.C.
DOUBLE POLE
LOOP-IN DISCONNECTING SERVICE CUT-OUTS.



Y 2422

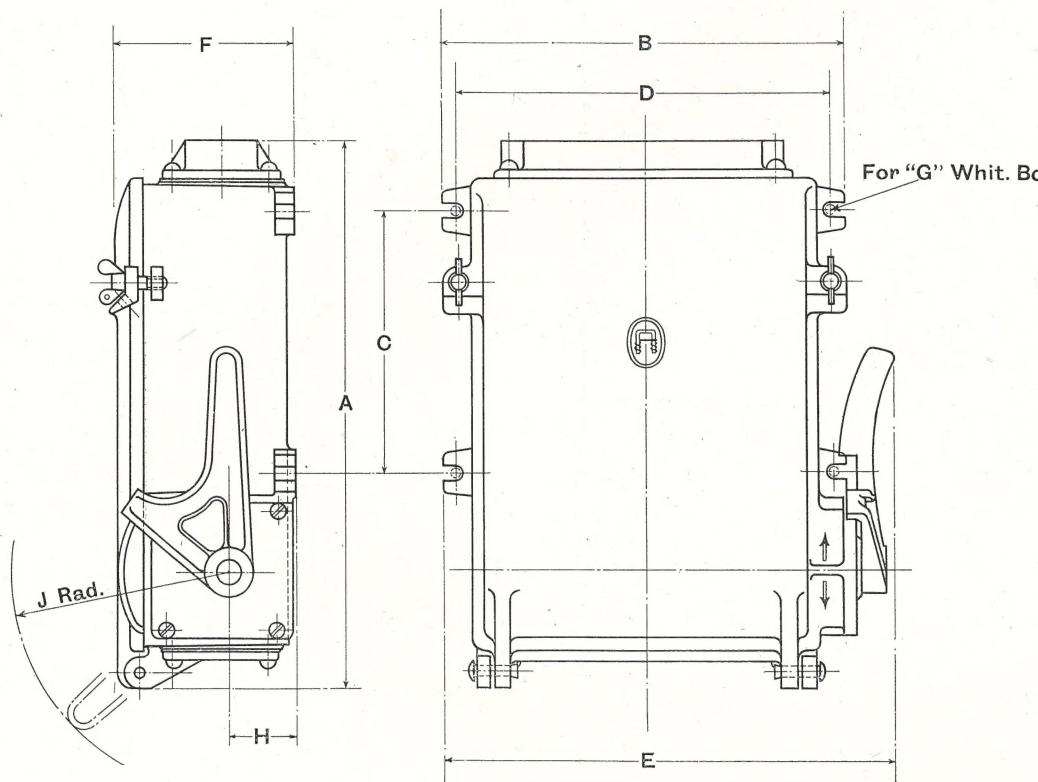


Y 2422

Carrying Capacity. Amps.	Catalogue No.	Approx. Overall Dimensions.			Approx. Weight.		Price, each. £ s. d.
		Height. ins.	Width. ins.	Depth. ins.	lbs.	kilos.	
30	Y 2422	12	6 $\frac{3}{4}$	3 $\$			

"D.B." QUICK-MAKE AND QUICK-BREAK SWITCHES WITH FUSES.

DIMENSION DRAWINGS.



Amps.	Cat. No.	A	B	C	D	E	F	G	H	J
60 D.P.	X 4414	17	9 $\frac{7}{8}$	8 $\frac{3}{16}$	8 $\frac{3}{4}$	11 $\frac{7}{16}$	5 $\frac{5}{16}$	3 $\frac{1}{16}$	2 $\frac{1}{8}$	7
60 T.P.	X 4434	17	13	8 $\frac{3}{16}$	11 $\frac{3}{4}$	14 $\frac{3}{16}$	5 $\frac{5}{16}$	3 $\frac{1}{16}$	2 $\frac{1}{8}$	7
100 D.P.	X 4415	20	12 $\frac{1}{2}$	9 $\frac{7}{8}$	11 $\frac{3}{16}$	13	7 $\frac{1}{16}$	3 $\frac{1}{16}$	3 $\frac{1}{16}$	8 $\frac{1}{4}$
100 T.P.	X 4435	20	16 $\frac{1}{4}$	9 $\frac{7}{8}$	15 $\frac{1}{8}$	17 $\frac{1}{16}$	7 $\frac{1}{16}$	3 $\frac{1}{16}$	3 $\frac{1}{16}$	8 $\frac{1}{4}$

Dimensions in inches.

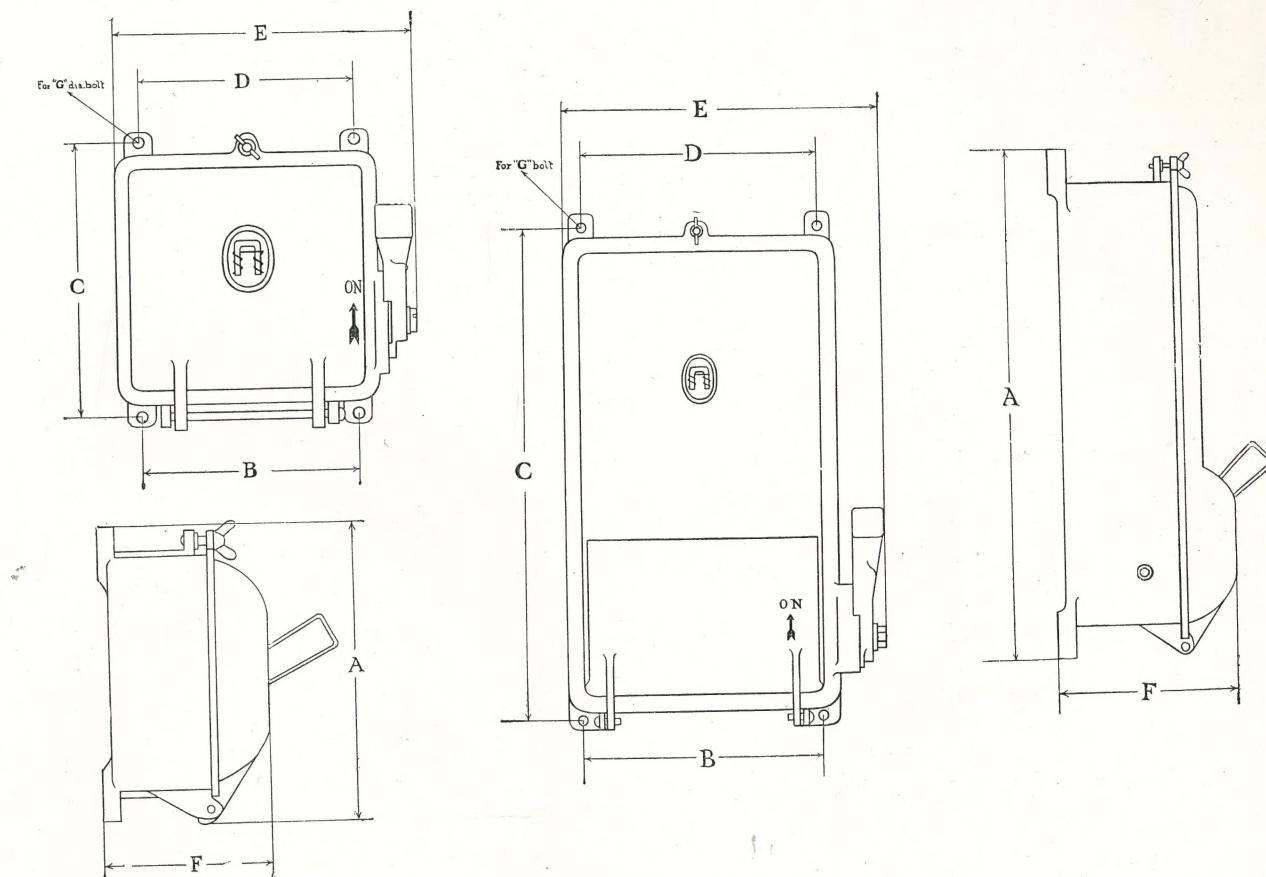
NOTE.—Although every care has been taken in compiling the above dimensions, no responsibility can be entertained for inaccuracies or consequential damages.

"D.B." SWITCHES.

"D.B. MAJOR" SWITCH WITH FUSES.

"D.B. SENIOR" SWITCHES AND SWITCHES
WITH FUSES.

QUICK-MAKE AND QUICK-BREAK.



SWITCH ONLY.							
Amps.	Cat. No.	A	B	C	D	E	F
30 D.P.	X 6081	7 $\frac{7}{8}$	5 $\frac{1}{2}$	6 $\frac{3}{4}$	5 $\frac{1}{2}$	7 $\frac{5}{8}$	4 $\frac{5}{16}$
30 T.P.	X 6083	8 $\frac{3}{8}$	8	7 $\frac{1}{4}$	8	10 $\frac{9}{16}$	4 $\frac{15}{16}$
60 D.P.	X 4404	9 $\frac{7}{16}$	6 $\frac{3}{4}$	7 $\frac{9}{16}$	6 $\frac{3}{4}$	9	4 $\frac{15}{16}$
60 T.P.	X 4424	10	9 $\frac{5}{8}$	8 $\frac{1}{2}$	9 $\frac{1}{16}$	12	4 $\frac{15}{16}$
100 D.P.	X 4405	13 $\frac{3}{8}$	12 $\frac{7}{8}$	9 $\frac{7}{8}$	11 $\frac{1}{4}$	14 $\frac{1}{2}$	8
100 T.P.	X 4425	13 $\frac{3}{8}$	17	9 $\frac{7}{8}$	15 $\frac{1}{2}$	18 $\frac{1}{2}$	8

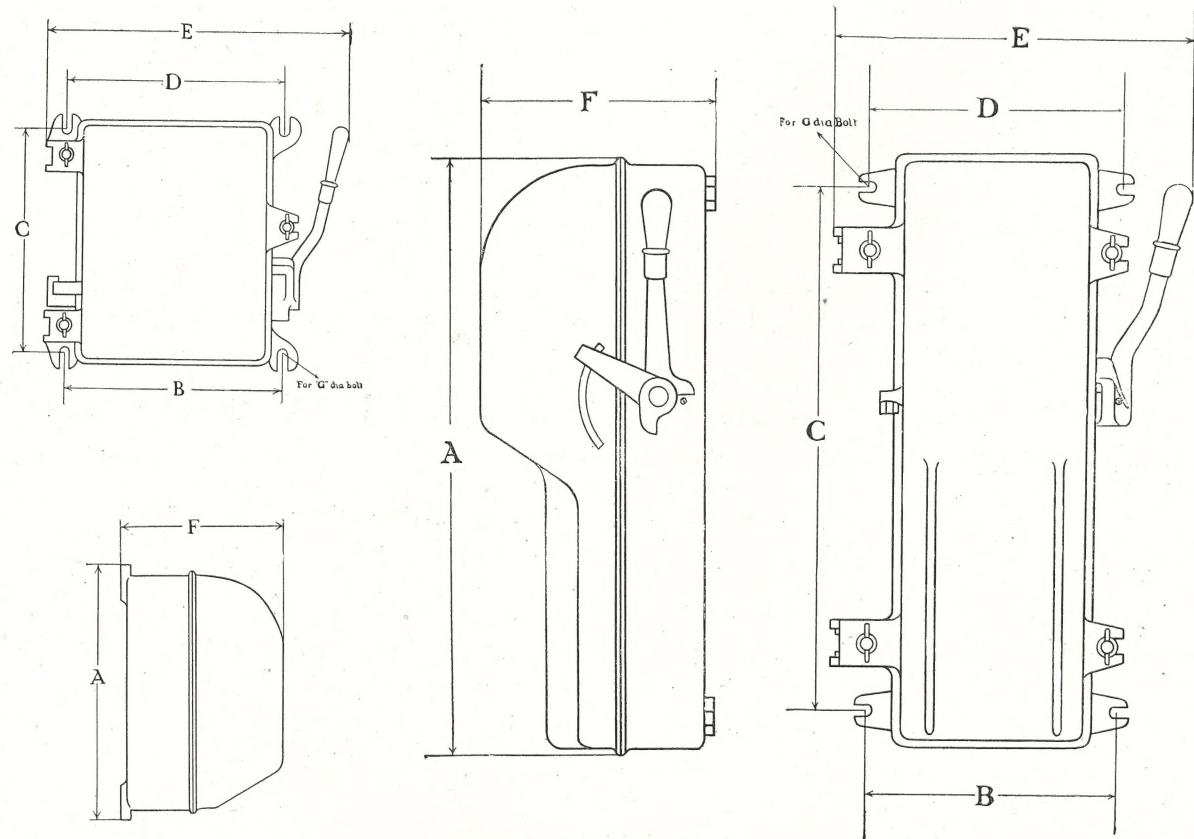
Dimensions in inches.

SWITCH WITH FUSES.							
Amps.	Cat. No.	A	B	C	D	E	F
30 D.P.	X 6085	12 $\frac{3}{8}$	5 $\frac{1}{2}$	11 $\frac{1}{2}$	5 $\frac{1}{2}$	7 $\frac{1}{2}$	4 $\frac{3}{8}$
30 T.P.	X 6087	12 $\frac{3}{8}$	8	11 $\frac{1}{2}$	8	10	4 $\frac{3}{8}$
50 D.P.	X 4412	15	6 $\frac{3}{4}$	13 $\frac{7}{8}$	6 $\frac{3}{4}$	9 $\frac{5}{8}$	5
50 T.P.	X 4432	16 $\frac{1}{2}$	9 $\frac{5}{8}$	15	9 $\frac{5}{8}$	12	5

NOTE.—Although every care has been taken in compiling the above dimensions, no responsibility can be entertained for inaccuracies or consequential damages.

G.E.C.

**"SALFORD" SWITCHES
AND
SWITCHES WITH FUSES.**



SWITCH ONLY.								
Amps.	Cat. No.	A	B	C	D	E	F	G
50 D.P.	X 6204	11 1/2	7 3/8	7 1/2	7 3/8	8 1/4	9	3/8
50 T.P.	X 6224	11	10 1/2	7 1/2	10 1/2	11 5/8	9 3/8	3/8
75 D.P.	X 6204A	11	9 5/16	10	9 5/16	13	7 1/4	3/8
75 T.P.	X 6224A	11	12 1/2	10	12 1/2	16 1/8	7 1/4	3/8
100 D.P.	X 6205	13 5/8	9 3/8	12 2/8	9 3/8	14	9 1/2	3/8
100 T.P.	X 6225	13 5/8	12 1/2	12 1/2	12 1/2	16 1/8	9 1/2	3/8
150 D.P.	X 6205A	14 1/4	10 1/2	12 2/8	10 1/2	14 3/4	9 1/2	3/8
150 T.P.	X 6225A	14 1/4	14 1/4	12 2/8	14 1/4	16 2/8	9 1/2	3/8
200 D.P.	X 6206	15 3/4	11	13 7/8	11	15	11 5/8	3/8
200 T.P.	X 6226	15 3/4	14 3/8	13 2/8	14 3/8	19 1/2	11 5/8	3/8
300 D.P.	X 6372	21 1/4	13 1/4	17	13 1/4	19 1/2	13 1/4	1/2
300 T.P.	X 6374	21 1/4	17 11/16	17	17 11/16	23 3/8	13 1/4	1/2
400 D.P.	X 6368	23 3/4	16 3/8	18	16 3/8	21	15 1/8	5/8

Dimensions in inches.

SWITCH WITH FUSES.								
Amps.	Cat. No.	A	B	C*	D	E	F	G
50 D.P.	X 6214	17 1/4	7 3/8	15 1/8	7 3/8	12 3/8	6 11/16	3/8
50 T.P.	X 6234	17 3/4	10 1/2	15 1/8	10 1/2	15 3/16	6 11/16	3/8
75 D.P.	X 6214A	19 1/8	8 3/8	16 7/16	8 3/8	13 1/4	7 7/16	3/8
75 T.P.	X 6234A	19 1/8	11 13/16	16 7/16	11 13/16	16 3/8	7 7/16	3/8
100 D.P.	X 6215	24 1/8	9 1/2	19 1/4	9 1/2	13 11/16	9 1/2	1/2
100 T.P.	X 6235	24 1/8	12 2/8	19 1/4	12 2/8	16 3/4	9 1/2	1/2
150 D.P.	X 6215A	25 7/16	10 1/2	20	10 1/2	14 7/16	9 1/2	1/2
150 T.P.	X 6235A	25 7/16	14 1/4	20	14 1/4	18 3/4	9 1/2	1/2
200 D.P.	X 6216	28	11	23 1/2	11	16 1/4	11 11/16	1/2
200 T.P.	X 6236	28	14 3/8	23 1/2	14 3/8	19 11/16	11 11/16	1/2
300 D.P.	X 6373	42 3/4	13 2/8	30	13 2/8	18 3/4	13 3/8	1/2
300 T.P.	X 6375	42 3/4	18	30	18	23 1/2	13 3/8	1/2
400 D.P.	X 6385	49	16 3/4	32	16 3/4	21 3/8	15 1/8	5/8

* 300 and 400 amp. sizes have also one additional bolt hole midway on each side.

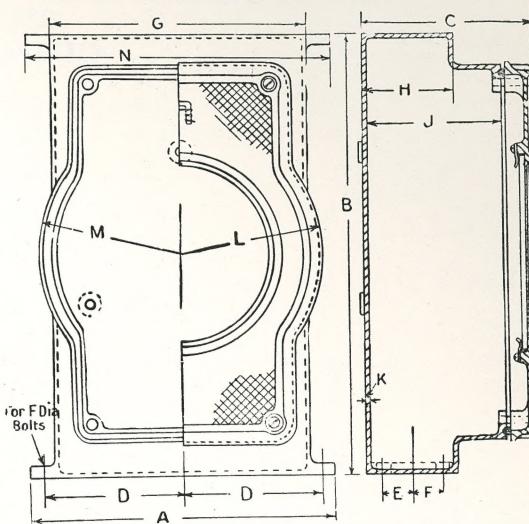
NOTE.—Although every care has been taken in compiling the above dimensions, no responsibility can be entertained for inaccuracies or consequential damages.

G.E.C.

"D" TYPE AMMETER ATTACHMENT.

Amps.	A	B	C	D	E	F	G	H	J	K	L	M	N
50 D.P.	6 1/4	16	5 5/8	2 9/16	7/16	3/16	6 1/4	2	4 3/8	1/8	4 3/4	4 5/8	—
50 T.P.	8 3/4	16	5 5/8	4 1/16	11/16	1/4	—	2	4 3/8	1/8	4 3/4	4 5/8	8 3/4
100 D.P.	7 3/8	15	5 3/4	3	7/8	1 1/4	7 3/8	3	4 5/8	1/8	4 3/4	4 5/8	—
100 T.P.	10 1/8	15	5 3/4	4 5/8	1	1 1/4	8 1/2	3	4 5/8	1/8	4 3/4	4 5/8	—
200 D.P.	7 1/4	15 1/2	6 1/8	3	1 1/4	5 1/16	7 1/4	3 3/4	5	1/8	4 3/4	4 5/8	—
200 T.P.	11 3/4	16 5/16	6 1/8	5 7/16	1 1/4	5 1/16	10	3 3/4	5	1/8	4 3/4	4 5/8	—
300- 400- D.P.	10 3/4	20	6 3/4	4 13/16	2 3/16	3 3/8	—	5 1/2	5 5/8	3/16	5 1/16	5 11/16	10 3/4
300 T.P.	14	20	6 3/4	6 7/16	1 7/8	3 3/8	—	5	5 7/16	3/16	—	—	14

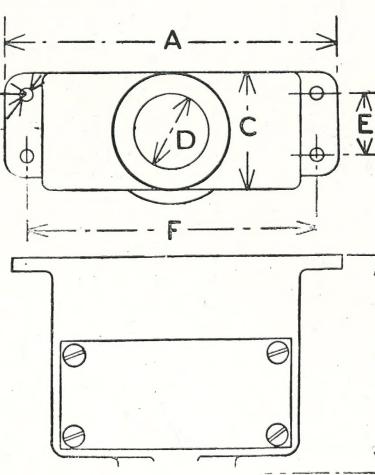
Dimensions in inches.



"F" TYPE AMMETER ATTACHMENT.

Amps.	A	B	C	D	E	F	G	H	J	K	L	M	N
50 D.P.	6 1/8	9 3/4	3 1/2	2 11/16	9/16	6 1/8	8	5/16	2 5/8	2 1/16	1/4	3/16	4 1/4
50 T.P.	8 7/8	9 3/4	3 1/2	4 1/16	11/16	8 7/8	8	3/16	2 3/8	2 15/16	5/16	1/4	7
100 D.P.	7 1/4	9 3/4	3 3/4	3 3/16	1	7 1/8	8	3/16	2 15/16	2 15/16	5/16	1/4	5
100 T.P.	10 1/8	10 1/4	3 3/4	4 5/8	1	10	9	3/16	2 15/16	2 15/16	5/16	1/4	7 3/4
200 D.P.	7 1/4	9 3/4	4 3/4	3 1/2	1 1/4	7 7/8	8	3/16	3 5/8	3 5/8	5/16	5/16	5 3/4
200 T.P.	11 3/4	10 1/2	4 3/4	5 7/16	1 1/4	11 3/4	9 5/16	3/16	3 5/8	3 5/8	5/16	5/16	9 3/8
300- 400- D.P.	10 3/4	11 1/2	5 9/16	4 13/16	2 3/16	10 3/4	10 3/8	5/16	5 1/2	5 1/2	5/16	5/16	7 3/4
300 T.P.	14	11 1/2	5 9/16	6 7/16	1 7/8	14	11 3/8	5/16	5 3/16	5 3/16	5/16	5/16	11

Dimensions in inches.



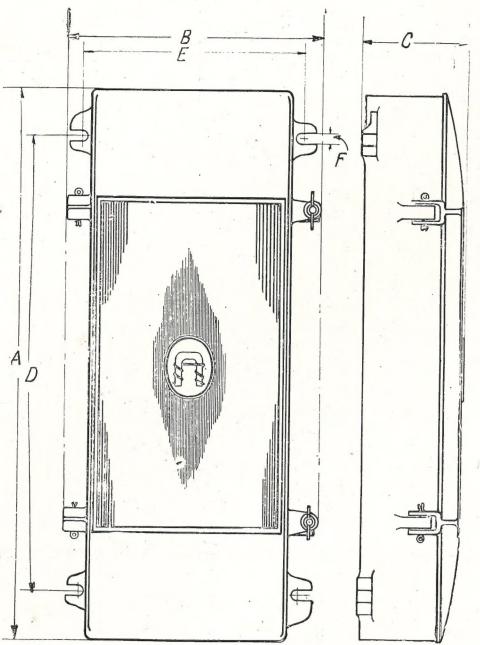
**CONDUIT BOXES
FOR "SALFORD" SWITCHES.**

Amps.	A	B	C	D	E	F	G
50 D.P.	6 1/8	4	2 1/8	1 1/2	1 1/8	5 3/8	7/32
50 T.P.	8 3/8	5 1/2	2 7/8	1 1/16	1 3/8	8 3/8	3/32
100 D.P.	7 1/4	5	3	1 1/16	2 1/16	6 3/8	3/32
100 T.P.	10 1/8	6 1/2	3	2 1/16	2 1/16</td		

S.E.C.

DISTRIBUTION FUSE BOARDS.

CHINA UNIT TYPE.



No. of Ways.	Amps.	DOUBLE POLE.						TRIPLE POLE.											
		Cat. No.	A	B	C	D	E	F	Amps.	Cat. No.	A	B	C	D	E	F			
2	30	X 4600	15 $\frac{3}{4}$	9 $\frac{3}{8}$	4 $\frac{3}{4}$	12	8 $\frac{1}{8}$	$\frac{7}{16}$	2	30	X 4640	23 $\frac{1}{2}$	10 $\frac{13}{16}$	4 $\frac{3}{4}$	19	9 $\frac{3}{4}$	$\frac{7}{16}$		
	60	X 4601	18 $\frac{1}{8}$	9 $\frac{3}{16}$	5 $\frac{1}{4}$	13 $\frac{1}{2}$	8 $\frac{1}{8}$	$\frac{15}{16}$		60	X 4641	27 $\frac{1}{2}$	10 $\frac{15}{16}$	5 $\frac{3}{16}$	22 $\frac{1}{4}$	9 $\frac{8}{15}$	$\frac{15}{16}$		
	100	X 4602	25 $\frac{1}{4}$	11 $\frac{9}{16}$	6 $\frac{3}{4}$	19 $\frac{3}{4}$	9 $\frac{15}{16}$	$\frac{7}{16}$		100	X 4642	36 $\frac{1}{8}$	13 $\frac{15}{16}$	6 $\frac{7}{8}$	32	12 $\frac{5}{16}$	$\frac{7}{16}$		
3	30	X 4605	15 $\frac{3}{4}$	9 $\frac{3}{8}$	4 $\frac{3}{4}$	12	8 $\frac{1}{8}$	$\frac{7}{16}$	3	30	X 4645	23 $\frac{1}{2}$	10 $\frac{13}{16}$	4 $\frac{3}{4}$	19	9 $\frac{3}{4}$	$\frac{7}{16}$		
	60	X 4606	18 $\frac{1}{8}$	9 $\frac{3}{16}$	5 $\frac{1}{4}$	13 $\frac{1}{2}$	8 $\frac{1}{8}$	$\frac{15}{16}$		60	X 4646	27 $\frac{1}{2}$	10 $\frac{15}{16}$	5 $\frac{3}{16}$	22 $\frac{1}{4}$	9 $\frac{8}{15}$	$\frac{15}{16}$		
	100	X 4607	25 $\frac{1}{4}$	11 $\frac{9}{16}$	6 $\frac{3}{4}$	19 $\frac{3}{4}$	9 $\frac{15}{16}$	$\frac{7}{16}$		100	X 4647	36 $\frac{1}{8}$	13 $\frac{15}{16}$	6 $\frac{7}{8}$	32	12 $\frac{5}{16}$	$\frac{7}{16}$		
4	30	X 4610	15 $\frac{3}{4}$	11	4 $\frac{3}{4}$	12	9 $\frac{3}{4}$	$\frac{7}{16}$	4	30	X 4650	23 $\frac{1}{2}$	10 $\frac{13}{16}$	4 $\frac{3}{4}$	19	9 $\frac{3}{4}$	$\frac{7}{16}$		
	60	X 4611	18 $\frac{1}{8}$	10 $\frac{15}{16}$	5 $\frac{1}{4}$	13 $\frac{1}{2}$	9 $\frac{7}{8}$	$\frac{15}{16}$		60	X 4651	27 $\frac{1}{2}$	10 $\frac{15}{16}$	5 $\frac{3}{16}$	22 $\frac{1}{4}$	9 $\frac{8}{15}$	$\frac{15}{16}$		
	100	X 4612	25 $\frac{1}{4}$	13 $\frac{15}{16}$	6 $\frac{3}{4}$	19 $\frac{3}{4}$	12 $\frac{5}{16}$	$\frac{15}{16}$		100	X 4652	36 $\frac{1}{8}$	13 $\frac{15}{16}$	6 $\frac{7}{8}$	32	12 $\frac{5}{16}$	$\frac{15}{16}$		
5	30	X 4615	15 $\frac{3}{4}$	14 $\frac{1}{4}$	4 $\frac{3}{4}$	12	13	$\frac{7}{16}$	5	30	X 4655	23 $\frac{1}{2}$	14 $\frac{1}{4}$	4 $\frac{3}{4}$	19	13	$\frac{7}{16}$		
	60	X 4616	18 $\frac{1}{8}$	14 $\frac{11}{16}$	5 $\frac{1}{4}$	13 $\frac{1}{2}$	13 $\frac{5}{8}$	$\frac{15}{16}$		60	X 4656	27 $\frac{1}{2}$	14 $\frac{1}{4}$	4 $\frac{3}{4}$	19	13	$\frac{7}{16}$		
	100	X 4617	25 $\frac{1}{4}$	18 $\frac{11}{16}$	6 $\frac{3}{4}$	19 $\frac{3}{4}$	17 $\frac{1}{16}$	$\frac{15}{16}$		100	X 4657	36 $\frac{1}{8}$	13 $\frac{15}{16}$	6 $\frac{7}{8}$	32	12 $\frac{5}{16}$	$\frac{15}{16}$		
6	30	X 4620	15 $\frac{3}{4}$	14 $\frac{1}{4}$	4 $\frac{3}{4}$	12	13	$\frac{7}{16}$	6	30	X 4660	23 $\frac{1}{2}$	14 $\frac{1}{4}$	4 $\frac{3}{4}$	19	13	$\frac{7}{16}$		
	60	X 4621	18 $\frac{1}{8}$	14 $\frac{11}{16}$	5 $\frac{1}{4}$	13 $\frac{1}{2}$	13 $\frac{5}{8}$	$\frac{15}{16}$		60	X 4661	27 $\frac{1}{2}$	14 $\frac{1}{4}$	4 $\frac{3}{4}$	19	13	$\frac{7}{16}$		
	100	X 4622	25 $\frac{1}{4}$	18 $\frac{11}{16}$	6 $\frac{3}{4}$	19 $\frac{3}{4}$	17 $\frac{1}{16}$	$\frac{15}{16}$		100	X 4662	36 $\frac{1}{8}$	13 $\frac{15}{16}$	6 $\frac{7}{8}$	32	12 $\frac{5}{16}$	$\frac{15}{16}$		
8	30	X 4625	15 $\frac{3}{4}$	17 $\frac{1}{2}$	4 $\frac{3}{4}$	12	16 $\frac{1}{4}$	$\frac{7}{16}$	8	30	X 4665	23 $\frac{1}{2}$	17 $\frac{1}{2}$	4 $\frac{3}{4}$	19	16 $\frac{1}{4}$	$\frac{7}{16}$		
	60	X 4626	18 $\frac{1}{8}$	18 $\frac{1}{2}$	5 $\frac{1}{4}$	13 $\frac{1}{2}$	17 $\frac{1}{16}$	$\frac{15}{16}$		60	X 4666	27 $\frac{1}{2}$	17 $\frac{1}{2}$	5 $\frac{1}{4}$	22	17 $\frac{1}{16}$	$\frac{15}{16}$		
	100	X 4627	25 $\frac{1}{4}$	23 $\frac{7}{16}$	6 $\frac{3}{4}$	19 $\frac{3}{4}$	21 $\frac{13}{16}$	$\frac{15}{16}$		100	X 4667	36 $\frac{1}{8}$	13 $\frac{15}{16}$	6 $\frac{7}{8}$	32	12 $\frac{5}{16}$	$\frac{15}{16}$		

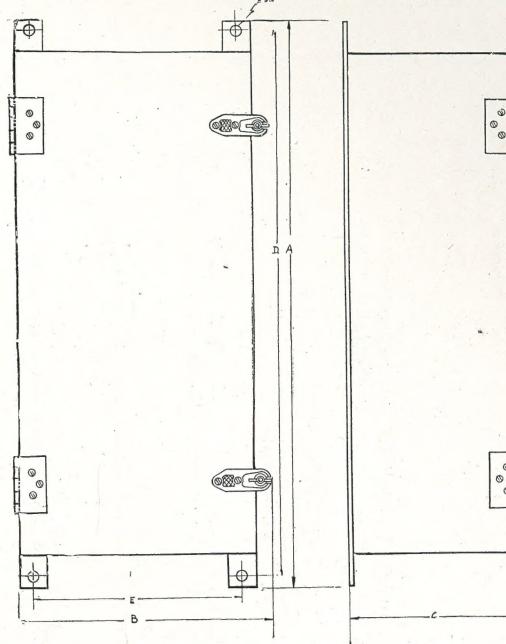
Dimensions in inches.

NOTE.—Although every care has been taken in compiling the above dimensions, no responsibility can be entertained for inaccuracies or consequential damages.

S.E.C.

DISTRIBUTION FUSE BOARDS.

STEPPED TYPE.



DOUBLE POLE.							DOUBLE POLE.										
No. of Ways.	Amps.	Cat. No.	A	B	C	D	E	F	No. of Ways.	Amps.	Cat. No.	A	B	C	D	E	F
2	20	X 8600	20 $\frac{1}{4}$	11	7 $\frac{1}{4}$	19	9		8	20	X 8648	20	22	7 $\frac{1}{4}$	18 $\frac{3}{4}$	20 $\frac{1}{2}$	
	30	X 8601	22 $\frac{3}{4}$	11 $\frac{1}{4}$	7 $\frac{1}{2}$	21 $\frac{1}{2}$	9 $\frac{1}{4}$			30	X 8649	22 $\frac{1}{2}$	22 $\frac{1}{2}$	7 $\frac{1}{2}$	21 $\frac{1}{2}$	21	
	60	X 8602	27 $\frac{1}{2}$	12	9 $\frac{1}{4}$	25 $\frac{7}{8}$	10			60	X 8650	27	26	9 $\frac{1}{2}$	25	24 $\frac{1}{8}$	
	100	X 8604	31 $\frac{1}{2}$	13 $\frac{1}{4}$	10 $\frac{1}{4}$	30 $\frac{3}{8}$	11 $\frac{1}{4}$			100	X 8652	32 $\frac{1}{2}$	29	11	30 $\frac{7}{8}$	27 $\frac{1}{2}$	
	150	X 8605	35 $\frac{1}{8}$	14 $\frac{1}{4}$	12	34 $\frac{3}{8}$	12 $\frac{1}{4}$			150	X 8653	37	32	12	34 $\frac{3}{8}$	30 $\frac{1}{2}$	
3	200	X 8606	38 $\frac{1}{8}$	15 $\frac{1}{4}$	12	37 $\frac{3}{8}$	13 $\frac{1}{4}$			200	X 8654	40 $\frac{1}{2}$	35	12 $\frac{1}{2}$	37 $\frac{3}{8}$	33 $\frac{1}{2}$	
	20	X 8608	20 $\frac{1}{4}$	12 $\frac{3}{4}$	7 $\frac{1}{4}$	19	10 $\frac{3}{4}$		2	20	X 8700	27<math					

NUMERICAL INDEX.

IRONCLAD SWITCHGEAR.

Cat. No.	Page.	Cat. No.	Page.	Cat. No.	Page.	Cat. No.	Page.	Cat. No.	Page.	Cat. No.	Page.
X 3010	8	X 6215	13	X 6369	14	X 8303	14	X 8665	13	X 9132	17
X 3012		X 6215A		X 6372		X 8304		X 8666		X 9133	
X 3020	9	X 6216	15	X 6373	13	X 8305	13	X 8667	14	X 9134	17
X 3021	10	X 6217	15	X 6374	13	X 8306	24	X 8668	15	X 9135	
X 3022	9	X 6219		X 6375		X 8307		X 8669		X 9136	
X 3024	11	X 6224	13	X 6383	14	X 8310		X 8670		X 9137	
X 4404	5	X 6224A	13	X 6385	13	X 8312		X 8673		X 9138	
X 4405		X 6225		X 6398	16	X 8600		X 8674		X 9139	16
X 4412	6	X 6225A		X 6439	15	X 8601		X 8675		X 9141	
X 4414		X 6226		X 6458	14	X 8603		X 8676		X 9142	
X 4415		X 6229	19	X 6459	15	X 8604		X 8678	2033		29
X 4424		X 6230		X 6461		X 8605		X 8680	2035		
X 4425		X 6234	13	X 6462		X 8606		X 8681	2037		
X 4434	5	X 6234A	13	X 6463		X 8608		X 8682	2039		
X 4435		X 6235		X 6465		X 8609		X 8683			
X 4600		X 6235A		X 6467		X 8610		X 8684	2049		28
X 4601		X 6236		X 6469	23	X 8611		X 8685			
X 4602		X 6238		X 6471		X 8612		X 8686			
X 4605		X 6239	22	X 6473		X 8613		X 8700	2052		30
X 4606		X 6240		X 6475		X 8614		X 8701	2053		
X 4607		X 6241		X 6477		X 8616		X 8702	2054		28
X 4610		X 6242		X 6479		X 8617		X 8703			
X 4611		X 6243		X 6481		X 8618		X 8704	2055		29
X 4612		X 6244		X 6484	15	X 8619		X 8705	2076		
X 4615		X 6245	23	X 6489		X 8620		X 8707			
X 4616		X 6247		X 6491	8	X 8621		X 8708	2140		28
X 4617		X 6248		X 6493	26	X 8622		X 8709	2142		
X 4620		X 6250		X 6501		X 8624		X 8710	2142		
X 4621		X 6251		X 6503		X 8625		X 8711	2144		
X 4622	25	X 6252	24	X 6505		X 8626		X 8712	2189		30
X 4625		X 6253		X 607	21	X 8627		X 8714			
X 4626		X 6254		X 6511		X 8628		X 8715	2190		28
X 4627		X 6255		X 6513		X 8629		X 8716	2192		
X 4640		X 6256		X 6515		X 8630		X 8717			
X 4641		X 6257		X 6517		X 8631		X 8718	2193		30
X 4642		X 6258	15	X 6685	22	X 8632		X 8719	2195		
X 4645		X 6259		X 6686	22	X 8633		X 8721			
X 4646		X 6260		X 6687	23	X 8634		X 8722	2340		
X 4647		X 6261		X 6700	24	X 8635		X 8723	2342		
X 4650		X 6262		X 6701	20	X 8636		X 8724	2344		
X 4651		X 6263		X 6702		X 8637		X 8725	2346		29
X 4652		X 6264		X 6703		X 8638		X 8726	2348		
X 4655		X 6265		X 6704	24	X 8641		X 8728	2353		
X 4660		X 6266		X 6705		X 8642		X 8729	2355		
X 4665		X 6267		X 6706	22	X 8643		X 8730	2354		
X 6081		X 6301		X 6707	22	X 8644		X 8731	2410		31
X 6083		X 6314		X 6708	24	X 8645		X 8732	2414		
X 6085	7	X 6315		X 6709	20	X 8646		X 8733			
X 6087		X 6322		X 6712	24	X 8647		X 8734			
X 6087L		X 6323		X 6714	24	X 8648		X 8735	2422		33
X 6091		X 6324		X 6715	20	X 8649		X 8736			
X 6092	14	X 6325	19	X 6716	24	X 8650		X 8737	2428		32
X 6094		X 6326		X 6717		X 8651		X 8738	2430		
X 6095		X 6328		X 6718		X 8652		X 8739	2432		
X 6204		X 6338		X 6719		X 8653		X 8740	2438		
X 6204A		X 6339		X 6720		X 8654		X 8741	2440		
X 6205	13	X 6348		X 6721		X 8655		X 8742			
X 6205A		X 6349		X 6722		X 8656		X 8743			
X 6206		X 6358		X 6723		X 8657		X 8744			
X 6207		X 6359		X 6724		X 8658		X 8745			
X 6214	19	X 6367	14	X 6725		X 8659		X 8746			
X 6214A	13	X 6368	13	X 6726		X 8660		X 8747			

SEPARATE SECTIONS OF CATALOGUE.

SECTION.

P ELECTRIC PLANT

- (3) Direct Current Motors
- (4) Alternating Current Motors
- (6) Transformers
- (7) G.E.C. Electric Lighting Sets

X (1) Switchboards

- (2) Air-Break Switchgear, Unenclosed (including Lightning Arresters, etc.)
- (3) Circuit Breakers
- (5) Motor Starters
- (7) Motor Controllers
- (8) Contactor Starters
- (9) Small Transformers
- (10) Contactors, Relays, and Accessories

X & Y Ironclad Switchgear

M Measuring Instruments

- (3) MAGNET Electric Fans
- (4) WITTON Fractional H.P. Motors

OS Osram and Robertson Lamps

OV Osram Valves

S Electric Light Supplies

SF (1) Illuminated Signs

- (2) Flashers and Accessories for Illuminated Signs

W (1) Wires and Cables

- (2) MAGNET Wiring Systems
- (3) Wiring Supplies

C MAGNET Conduit and Accessories

- (1) Fixtures
- (2) Fittings Accessories
- (3) Glassware
- (4) Industrial and Street Lighting Fittings and Accessories

D (1) MAGNET Electric Household Appliances

- (2) MAGNET Electric Fires
- (3) MAGNET Domestic Electric Cooking Equipment

H (2) MAGNET Electrically Heated Industrial Appliances

- (3) MAGNET Industrial and Commercial Electric Cooking Equipment

L (1) Electric Bells, Batteries, and Accessories

- (3) Colliery Signalling, Miners' Hand Lamps

K Telephones and Fire Alarms

BC (1) GECOPHONE Radio Receivers, Loud Speakers, Components and Accessories

Any of the above will be sent on receipt of application stating which section is required.